ean Houpt Stepping Down

Peds Receives $2.5 Million Gift

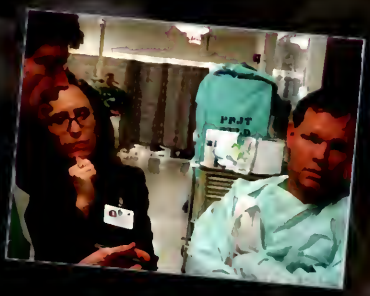
Summer 2003

UNC Medical Bulletin

A publication for alumni and friends
of the University of North Carolina at Chapel Hill School of Medicine and UNC Health Care

WHEN DISASTER STRIKES

A behind-the-scenes look at how UNC Hospitals reacts to an external crisis



A firefighter battles an inferno caused by a plant explosion in Kinston, N.C., on Jan. 29. The disaster spurred UNC caregivers into crisis mode and prompted a visit by the governor.

from the dean

Dear Alumni and Friends:

As many of you may already know, I have decided to step down as Dean, Vice Chancellor and CEO by May 2004, after a national search has determined my successor. I do so with heartfelt gratitude for your support and that of many others during my tenure.

My decision comes after 14 years as a dean at two institutions, placing me among the longest serving deans in the country. While it has been my pleasure to serve in this role for these past years, I feel the time is right to turn the reins over to new leadership that will infuse new ideas and a different perspective into the organization.

Since June 1997, I have had the honor of providing leadership to an organization whose national recognition in academic medicine has risen to even greater heights. We have recruited a strong cadre of external and internal department chairs and center directors who will lead the institution into the next decade or two. During this time we established two new academic departments: the Department of Genetics and the Department of Otolaryngology/Head and Neck Surgery and several new centers, including the Center for Maternal and Infant Health and the Carolina Center for Genome Sciences. By extension, our department chairs have been recruiting outstanding new faculty. We have increased the rigor of our educational programs and our MD graduates are entering ever more competitive residency programs. We have enhanced our career development program for junior faculty with mechanisms for successfully competing for external research funding. Many of our departments currently have among their ranks the best and the brightest of the next generation of researchers as evidenced, in part, by our NIH external awards, which have almost doubled since 1997.

We have undertaken the renovation of several existing buildings among the 1 million square feet of existing medical school space as well as new construction of 600,000 square feet for research and 100,000 square feet for office space. These new facilities will empower UNC to further its role in the fields of neuroscience, bioinformatics and biomolecular research. As an organization we have dramatically changed more than the physical layout of our campus — we also have reshaped the landscape of patient care in North Carolina.

With the creation of UNC Health Care, along with the opening of the N.C. Children's and N.C. Women's Hospitals, residents from all 100 counties have benefited from a continuum of care never before available. We have enhanced our market position with our strategic partnership with Rex Healthcare and strengthened our position in the managed care arena.

Our graduates are important intellectual and financial resources to our institution. Alumni giving to the Loyalty Fund and friends giving to the Excellence Fund has risen steadily and provides invaluable support to our students, residents and faculty.

I look forward to another academic year and after graduation next year, I plan to take some time off and then return as a faculty member. Your efforts and support have helped us achieve a great deal on my watch. I thank you again for your loyalty and commitment to UNC.

Sincerely,

Jeffrey L. Houpt

Jeffrey L. Houpt, MD
Dean, School of Medicine
Vice Chancellor for Medical Affairs
CEO, UNC Health Care System

contents

COVER STORY
Anatomy of a disaster 2

FEATURES

Fellowship provides students with international health care opportunities 16

Taking heart 18

What I am today 22

An honor and a privilege to serve 26

A new dimension 30

DEPARTMENTS

From the Dean . . . . . Inside Front Cover

Special Events 12

Faculty 32

News 34

Alumni 41

Research 42

Development 46

From the President . . . . . Inside Back Cover

CME/Alumni Calendar . . . . . Back Cover

page 2

page 18

page 22

on the cover

An explosion at West Pharmaceutical Services in Kinston on Jan. 29 was just the type of external disaster for which UNC Hospitals braces itself. A firefighter is shown battling the blaze. Later, UNC physicians received one of several patients in the Emergency Department, while colleagues James Manning, MD, Cherri Hobgood, MD, and Bruce Cairns, MD, conferred on injuries. Within days, Gov. Mike Easley visited patients and relatives.
Cover photo by Brian Strickland. Inset photos by James L. Larson, MD, (top and center) and Jay Mangum (bottom).

The UNC Medical Bulletin is published four times annually by the UNC-Chapel Hill Medical Alumni Association, Chapel Hill, NC 27514. Postage is paid by the nonprofit association through U.S. Postal Permit No. 24. Address correspondence to the editor, Office of Public Affairs & Marketing, School of Medicine, CB#7600, University of North Carolina, Chapel Hill, NC 27514.

Medical Alumni Association Officers

President
John W. Foust, MD '55
Charlotte

President Elect
George W. Cox, MD '66
Atlanta, Ga.

Vice-President
William M. Hemdon Jr., MD '81
Charlotte

Secretary/Treasurer
Theodore C. Kerner, MD '85
Lewisville

Editorial Staff

Karen McCall
Vice Pres. Public Affairs & Marketing

Lynn Wooten
Editor

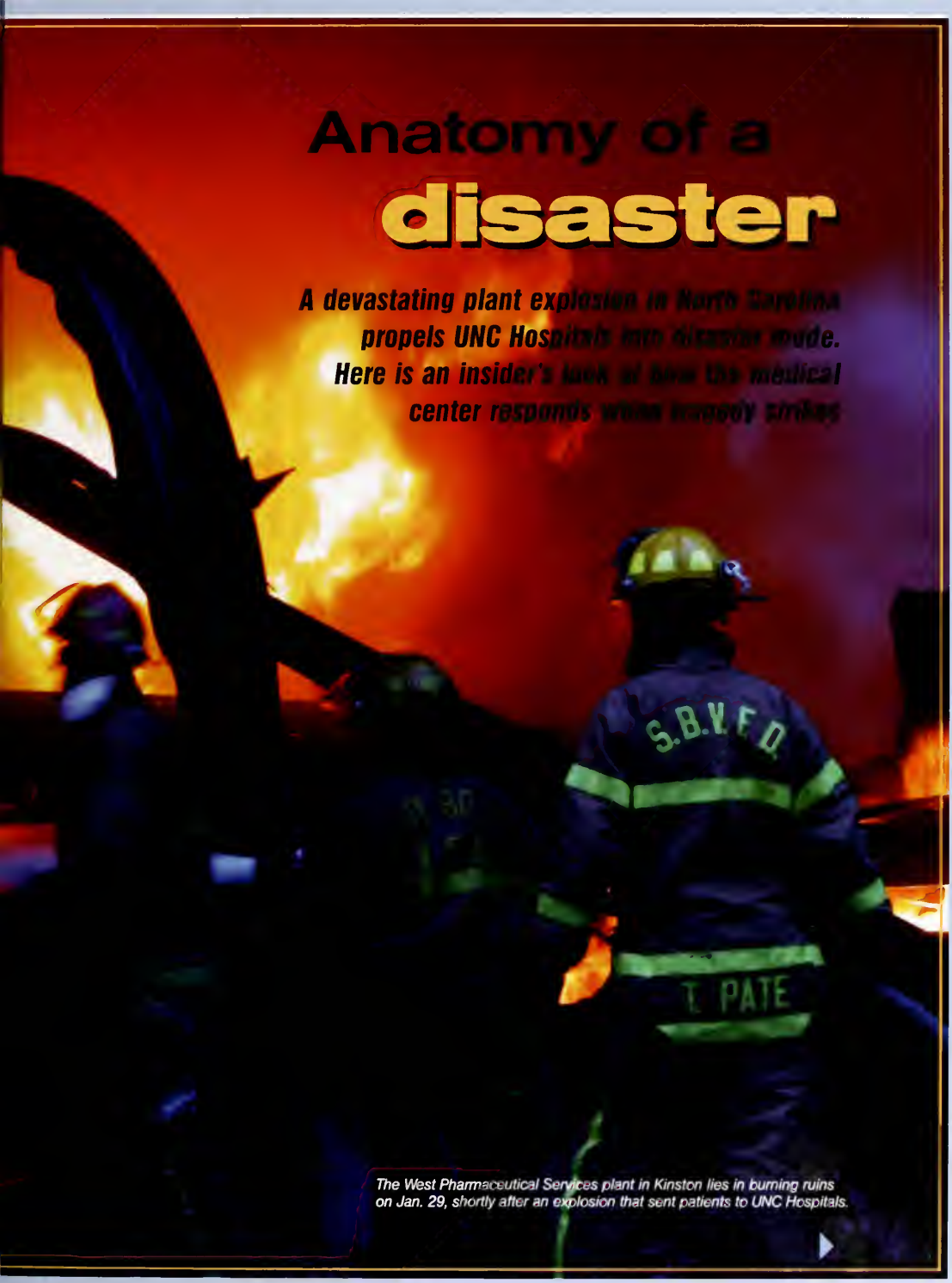
Joy Buchanan, Bernadette Gillis, Tom Maltais, Rebekah Temple and Eleanor Lee Yates
Contributing Writers

Tom Hughes, James L. Larson, MD, Jay Mangum, Brian Strickland, Rebekah Temple and Brad Wilson
Photographers

Photo by Brian Strickland

Anatomy of a disaster

A devastating plant explosion in North Carolina propels UNC Hospitals into disaster mode. Here is an insider's look at how the medical center responds when tragedy strikes



The West Pharmaceutical Services plant in Kinston lies in burning ruins on Jan. 29, shortly after an explosion that sent patients to UNC Hospitals.

Photo by James L. Larson, MD

Above and right, UNC physicians and nurses work on patients from Kinston after they arrive in the Emergency Department.

By Eleanor Lee Yates

Michael Peck, MD, director of the N.C. Jaycee Burn Center, had been under the gun for weeks with a floor full of patients. On Jan. 29, he saw a small window of time to run an errand on campus. That's when he got a page that would turn his world topsy-turvy for months. Burn victims – originally predicted to be as many as 100 – were headed to the center at UNC Hospitals.

"My cell phone battery went dead, and here I was at a pay phone, trying to deal with this," Dr. Peck recalled.

By most accounts, the early afternoon explosion at West Pharmaceutical Services in Kinston occurred near the automated compounding systems, where rubber and plastic are made from chemicals in large mixers. More than 100 employees were at the plant, which manufactures syringe plungers and IV fittings.

Three workers perished in the explosion, which shattered windows miles away. And others, badly injured, were trapped until rescue workers arrived.

"Our biggest challenges in the first hours were largely with communication and transport," Dr. Peck said. "For many hours we didn't know the extent of the damage. Communication was horrible. None of us had any idea what to expect, so we went to our best guess plan. Our assump-

tion was that we might receive more casualties than we could handle."

Bruce Cairns, MD, was the attending physician on duty in the division of trauma, burns and surgical critical care.

"We first heard there had been a plane crash," said Dr. Cairns, associate director of the Burn Center and an assistant professor of surgery. With any trauma, both the emergency department and the trauma surgery service are contacted and together they coordinate subsequent transfers and pre-hospital care.

"We knew we were going to get multiple patients, so we're immediately thinking how can we deliver high quality care and appropriately allocate resources? The major decision making begins when you know patients are coming," Dr. Cairns explained.

But triage can prove challenging. Some patients arrived directly from the scene. Others would first detour to different hospitals.

Dr. Cairns knows about pressure. While serving in the Navy in Guam, he helped handle 19 patients within the first two hours after a major plane crash. He was a UNC surgery resident when a devastating explosion occurred inside a chicken processing plant in Hamlet, N.C. He was also at UNC when the 1994 fatal crash occurred during an air show at nearby Pope Air Force Base.

> "We knew we were going to get multiple patients, so we're immediately thinking how can we deliver high quality care and appropriately allocate resources?" Dr. Cairns explained.

So on this January afternoon, he and the rest of the trauma surgery service moved into disaster mode. "We had a lot of blood. We arranged for X-rays, respiratory therapy, ventilators, and had the operating rooms and trauma teams ready. During the triage of mass casualties, it's the minor details that often become major," Dr. Cairns said.

TWO YEARS AGO, Jane Brice, MD, an emergency medicine physician, took on the role as head of UNC Hospitals' Disaster Committee. After Sept. 11, hospital administration joined with agencies throughout the state in adopting a new emergency plan, the Hospital Emergency Incident Command System. Now all hospitals and emergency medical services have interchangeable job and department titles, which makes communication easier. The plan called for doctors and food service workers alike to drill for both internal and external disasters.

Photo by James L. Larson, MD

At 2:50 p.m. on Jan. 29, Drs. Brice and Cairns, James Manning, MD, vice chair of Emergency Medicine, Anthony A. Meyer, MD, chair of Surgery, and Sandy Pabers, RN, emergency nurse manager, met with Chad Lefteris, the hospital administrator on call. They believed that information coming from Kinston merited triggering the disaster plan.

"We had earlier reports there were 300 dead. We were getting such conflicting reports," Lefteris said. "I talked to Dr. Peck about the bed status and who could go to regular units. It was a high census day and we were lucky we could use ICU beds."

They set up a disaster command center in the Emergency Department conference room. Internal communications were organized, with 10 phones connected and walkie-talkies distributed to disaster committee members. Lefteris helped make sure the staff had what they needed.

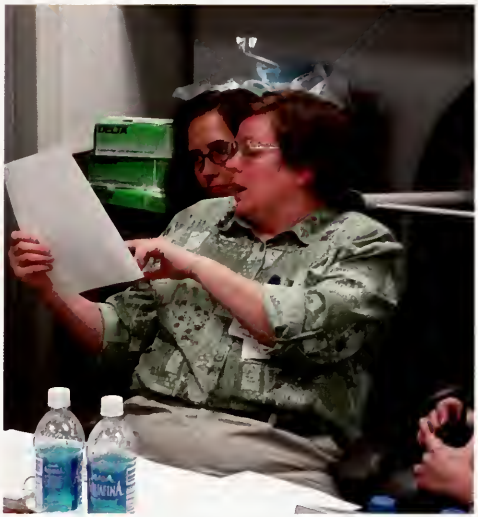


Photo by James L. Larson, MD

Cherri Hobgood, MD, and Jane Brice, MD, confer in the disaster command center.

"We were running low on ventilators, so the logistics section chief had Rex Hospital in Raleigh send more by ambulance," he said. The staff, in turn, sprung into action.

"The Environmental Services staff were speed demons," Dr. Brice said. "They had a list of rooms to be emptied. They cleaned them in moments. People like that were the unsung heroes."

The hospital also halted elective surgery for the afternoon.

> "Once we had the feeling we were getting a dozen or so patients, everything rapidly went into place. We were ready and set when the first patient arrived." – Dr. Manning

PATTI CORBETT, director of UNC Air Care and Ground Transport Services, received a call about the explosion at 1:56 p.m. Within 15 minutes she dispatched two helicopters to Kinston, a 40-minute flight. Seasoned paramedic Rob Bednar remembered the helicopters landing a short distance from the site, upwind from the billowing smoke near the hastily created triage area.

"There was confusion because of the involvement of so many agencies," said Bednar, who helped respond during the 1993 World Trade Center explosion. Local emergency workers pulled burn victims to the triage area. Some victims also had fractures, while others had lacerations embedded with debris.

Amid sobs and screams, rescuers went about their work.

"I just focused on the task at hand," Bednar said. "That's how I make sense of chaos. Otherwise you become part of the problem."

As soon as possible, the UNC team loaded two patients into one helicopter and headed back to Chapel Hill. The second helicopter and its crew stayed at the scene to help with triage and treatment.

Meanwhile, Duke University's LifeFlight service and an East Carolina University helicopter each flew a patient to UNC, and a Marine aircraft from Cherry Point, N.C., brought another.

"Once we had the feeling we were getting a dozen or so patients, everything rapidly went into place. We were ready and set when the first patient arrived," Dr. Manning said.

Around 4:30 p.m., the first patients arrived.

"The explosion had enough force to cause many penetrating and blunt injuries, so the patients went through trauma evaluation in the Emergency Department," Dr. Manning said. One patient had extensive lacerations to an arm and another suffered a ruptured spleen. Being one of four Level I trauma centers in North Carolina, UNC Hospitals is well suited to handle casualties of this magnitude. Nonetheless, UNC was fortunate regarding the time of day because there were plenty of trauma and emergency medicine residents, nurses, respiratory therapists, and burn surgeons on hand.

But UNC officials still didn't know how many patients would ultimately arrive.

Concerned about an overflow problem, they placed on standby Wake Forest University Baptist Medical Center in Winston-Salem, the Joseph M. Still Burn Center in Augusta, Ga., and the Shands Burn Center at the University of Florida in Gainesville, Fla.

As soon as off-duty colleagues heard the news,

Red Edwards, left, visits his son, Jim, in his hospital room at UNC as Wes Scholler, MD, looks on. Jim Edwards was discharged from UNC Hospitals on June 14, the last patient from the Kinston explosion to leave the hospital.

many of the nurses and other personnel headed to the Burn Center. At least two nurses are needed for every burn patient, according to Fred Price, RN, nurse manager in the Burn Center. The nurses scurried around for more IV pumps, prepared dressings, helped move patients to different locations, worked with Environmental Services to arrange for additional cleaned rooms and sought extra equipment.

The Burn Center has 21 beds — 11 in ICU and 10 in acute care.

"We were able to temporarily move most of the patients here to other areas of the hospital until we could determine the extent of the disaster," Price said. "We made room for 10 ICUs and six floor patients."

That afternoon, the weather became too stormy for the helicopters to fly, so five other patients arrived by ground transport from the trauma center at ECU.

"By midnight we knew we weren't going to get any more," Dr. Peck said. His 10 patients were all critically ill, suffering from severe smoke inhalation. The amount of smoke inhalation is the strongest survival indicator, Dr. Peck pointed out. Burns ranged from 30 to 67 percent, most all third degree.

As the patients arrived in the Burn Center, nurses and doctors placed them on stretchers and under showers to prepare for treatment. All were placed on ventilators. Later, the staff

oversaw respiratory and occupational therapy.

When UNC officials knew the last patients were on their way by ambulance around 8 p.m., they felt it was safe to close the command center.

But the crisis continued.

THE OFFICE OF Public Affairs & Marketing had been deluged with calls from national and local media since almost immediately after the explosion.

"Our office initiated our crisis communication plan," said Karen McCall, vice president of Public Affairs & Marketing — herself a veteran of the Pope Air Force Base plane crash and Hamlet fire disasters. Responsible for the medical center's internal and external communications, McCall and her staff worked around the clock for two days. Early on, McCall felt it would be good to have a medical staff member fielding the questions at the news conferences. She found just the right person in Cherri Hobgood, MD, an emergency medicine specialist who became the "face" of UNC Hospitals during the Kinston disaster.

> "Our office initiated our crisis communication plan." – Karen McCall, vice president, Public Affairs & Marketing

"There were other doctors with less emergency medical experience than I had," Dr. Hobgood said. "I had handled some bad wrecks – but never had I been involved in a disaster. Yet I knew how the Emergency Department works. I thought the best thing I could do was carry information to the public."

She said her biggest challenge at news conferences was reporting only facts and avoiding speculation.

"I tried to give a meaningful sense of what was going on," she said. Many families were watching the news, and I didn't want it to sound like doomsday. I didn't want to alarm families, but the patients were seriously injured and the survivability numbers can be horrible."

Hospital Police also had their work cut out for them.

"One of our roles was controlling who comes and goes," said Tom Smith, director of the Hospital Police and Transportation department. Off-duty medical staff poured in to help. "Some people parked in emergency spots, and we had to ask them to move. Volunteers were also coming in. I think that next time we'll have a better way of identifying who is really needed."

Families of the victims arrived early evening. But the biggest challenge, Smith pointed out, was the media.

"They needed to park their trucks. They wanted live interviews. A few reporters wanted to interview family members in a waiting room. We had to escort a few out," he recalled.

Courtesy of The Daily Tar Heel/Elspeth Callahan

Michael Peck, MD, medical director of the N.C. Jaycee Burn Center, discusses the victims' injuries with the media at a news conference the day after the explosion.

AS RELATIVES AND MEDIA waited elsewhere, doctors in the Burn Center and the trauma surgery service stabilized patients. They monitored breathing, checking airways and circulation. Two patients went to the operating room that night and others had multiple invasive procedures performed in the burn intensive care unit. Shock is often a problem with burn victims. The staff made sure patients got

Photo by Jay Mangum

Gov. Mike Easley talks to the media following his visit to the N.C. Jaycee Burn Center on Feb. 12. The governor met with explosion survivors and their families.

fluids and electrolytes. Burn victim care has improved remarkably through the years. In 1940, a burn victim with 50 percent burns would almost certainly die, Dr. Peck said.

On Friday, Jan. 31 came the first death of one of UNC's Kinston patients. Kevin Cruiess, 22, had severe burns and trauma injuries. He had worked at West less than a year. On Feb. 18, Milton Murrell, 57, a longtime plant worker passed away, having suffered severe burns and smoke. And on March 3, Allen Grant, 62, a patient with smoke inhalation as well as other trauma, died.

The Burn Center's chaplain, Shirley Massey, was a calming presence for patients and their families.

"Medical teams healed the physical; we focus on the emotional and spiritual," she said. Hospital chaplains spent hours upon hours with patients, who for the most part were eager to talk.

"That's part of the healing process. If they don't talk, depression can set in. We help them put words on their feelings and cope with the pain," Massey said. Many patients opened up with their worries on unemployment, troubled finances and disfigurement.

"They worry that they look 'ugly,' " Massey said.

The families grew close while passing the time together in the waiting rooms. The news of a patient's death hit them all hard, Massey said.

On the afternoon of the explosion, Vic O'Neal, director of Patient Relations, asked his staff how many could stay late. "All 12 stayed until 10 or 11, and some stayed until 6 the next morning," O'Neal said.

Throughout the evening, family members arrived in various emotional states. Simply put, Patient Relations had their hands full.

"I think some were in shock. Most were emotional," O'Neal recalled. Patient Relations teamed with hospital chaplains and social workers to care for families and helped coordinate the outpouring of food and other donations from churches, civic organizations and businesses. Patient Relations also arranged two meetings for West Pharmaceutical President Don Morel with patients and their families.

In general, the consensus among hospital staff was one of pride in a job well done — and of obvious devotion dur-

ing a time of real need. For example, when the disaster occurred, one nurse immediately cancelled her Florida vacation. By the end of February, Burn Center nurses had put in so much overtime that the usual 425 shifts a month jumped to 660. The Kinston patients did not present any medical challenges the staff wasn't used to – but the workload was tough. And yet out of 660 shifts, the call-out rate for illness or other reasons was just nine.

"We hit this head on," Price concluded.

ON FEB. 12, Gov. Mike Easley visited with the survivors and their loved ones at the Burn Center. He asked one patient what the most difficult part of his ordeal had been so far.

"Patience," the man replied.

The next day, another patient, Sharedenna Ratcliffe, slipped out the back of the hospital to avoid a media onslaught awaiting her at the front entrance.

As winter gave way to spring, the Burn Center said good-bye to four more patients. The patients continued to see their doctors, first weekly, then about once a month at the burn clinic. By May, just one patient remained, 47-year-old James Edwards, Jr., who is now blind from the explosion. He now faces probably years of rehabilitation.

Months afterward, away from those tense-filled, confusing hours, the Hospital Incident Command Center members and others looked back on what went well and what improvements can be made during disasters yet to happen. Many say they learned from the experience and will be even better prepared next time.

"But disasters are so variable and so difficult to plan for," Dr. Manning pointed out. "I think everyone did a superb job. There was such an esprit de corps here."

For Dr. Brice, the Kinston tragedy proved something important. UNC's new Hospital Incident Command System worked.

"It showed us we could make order out of chaos. Everyone came and did their jobs. I don't think the patients could have had better care."

Eleanor Lee Yates is a free-lance writer who lives in Wake Forest and once was a reporter for The Fayetteville Observer. She is a frequent contributor to the UNC Medical Bulletin.

Photo by Brian Strickland

Following his stay at the N.C. Jaycee Burn Center, survivor James Hardison relishes time back home in Kinston. Protective gloves are one reminder of his continuing treatment.

special EVENTS

Photo by Chapel Hill News

Do-re-mi

The great-grandchildren of Werner vonTrapp, the patriarch portrayed in The Sound of Music, *performed in the lobby of the N.C. Children's Hospital.*

Dedication

Chancellor James Moeser, right, joined in the ribbon-cutting of the newest addition to the Biomolecular Research Building. For the first time, clinical and basic science researchers will be located in adjacent space, thereby enhancing interdisciplinary interactions.

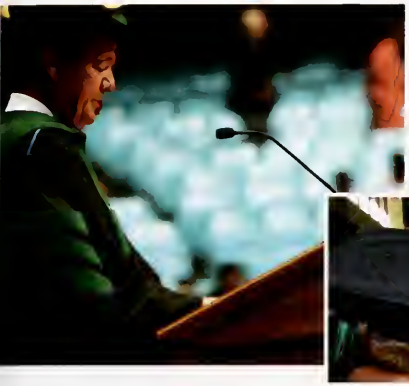
'Phantom' visits N.C. Children's Hospital

Cast members of The Phantom of the Opera *brought the Paris Opera House to Chapel Hill recently with a special performance at the N.C. Children's Hospital.*

The surprise appearance was arranged for Rebecca Simpson, a patient at the Children's Hospital, by her parents, Julie Blatt, MD, and Broadway Series South. Simpson was unable to attend a performance at the BTI Center for the Performing Arts in Raleigh on her birthday the night before.

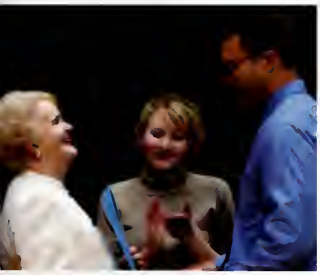
Cast members Brad Little (the Phantom), Rebecca Pitcher (Christine Daaé) and Tim Martin Gleason (Raoul, Vicomte de Chagny) met with Simpson in private prior to the performance. They discussed Simpson's love of musical theater with her and gave a professional rendition of "Happy Birthday." The cast then moved to the Charlie Gane Stage in the lobby of the Children's Hospital where they sang "Music of the Night" and "All I Ask of You" for patients, employees and one very happy birthday girl.

Photo by Jay Mangum



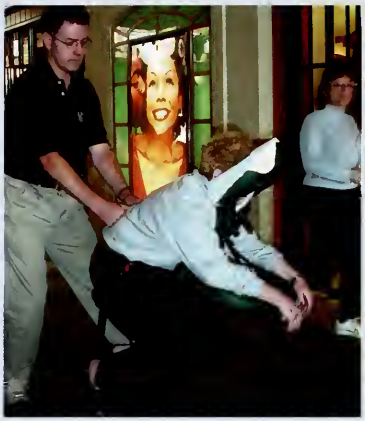
GRADUATION

Dean Jeffrey L. Houpt, top left, spoke at the commencement ceremony for the School of Medicine on May 18 at the Dean E. Smith Center in Chapel Hill.



Photos by Brian Strickland

TAKING SHAPE



Photos by Lynn Wooten

Members of the Heels in Motion Mallwalkers Group, sponsored by UNC Health Care, limber up with chair massage and wall pushups before heading off to walk through The Streets of Southport Mall in Durham. The new club already has more than 300 members.

WOMACK SOCIETY MEETS

Photos by Brian Strickland

The Nathan A. Womack Surgical Society held its biennial meeting May 1-2 in Chapel Hill. George F. Sheldon, MD, presented a lecture on "Training the Surgical Workforce."

Awards presented at Spring Medical Alumni Weekend

The Spring Medical Alumni weekend, held April 4–6, featured several award presentations and lectures.

The School of Medicine and the Medical Alumni Association presented five Distinguished Service Awards and a Distinguished Faculty Award at the annual awards banquet.

The Distinguished Service Award recipients were Neil Bender, MD '63, of New Bern, N.C.; Ira Hardy, MD '63 of Greenville, N.C.; Howard Lee of Chapel Hill, N.C.; Hugh McAllister, MD '66 of Houston, Texas; and the late Ray Hayworth, MD '62 of Knoxville, Tenn.

The Distinguished Faculty Award went to Wesley C. "Butch" Fowler, MD, Leonard Palumbo Professor of Obstetrics and Gynecology.

Dr. T. Franklin Williams presented the Spicer-Breckenridge Lecture. The weekend also included a Continuing Medical Education program on "Infections for the Generalist," Council Meeting with the election of new officers and class reunions. The weekend concluded on Sunday morning with a brunch at the DuBose House.

Class reunion and Area Campaign Chairs for fiscal year 2002-03 (from right to left) with National Loyalty Fund Chair John Foust, MD, '55, Frank Reynolds, MD '43, Robert Walther, MD '73, Rick Worf, MD '78, Paul Berr, MD '76 and John Herion, MD '83.

Fellowship provides students with international **health care opportunities**

By Bernadette Gillis

Studying abroad can be the experience of a lifetime, enriching a student's education. However, it's an experience that not every student can afford. The Perkins-Burke Fellowship makes traveling abroad possible for students who could not otherwise afford it.

Established in 2001, the fellowship allows students to spend six to eight weeks studying any aspect of health care in Europe or Canada between their first and second years of medical school. Petya Lee Perkins, MD '77, funds the fellowship at $9,000 a year. Fellows use the $9,000 stipend to cover the cost of the experience and to subsidize lost income from summer employment.

Established in 2001, the fellowship allows students to spend six to eight weeks studying any aspect of health care in Europe or Canada between their first and second years of medical school.

The Perkins-Burke Fellowship is administered by The Medical Foundation of North Carolina Inc. and the Office of Student Affairs. The selection of the fellows is partially based on need and favors students who have never been to Canada or Europe.

Traci Piazza, international program coordinator, said the fellowship offers a unique opportunity for medical students. "Being able to see a different health care system really opens their eyes," she said. "Dr. Perkins hoped that the fellowship would make it possible for a student who otherwise wouldn't be able to afford it."

Michelle Curtis, who is about to enter her third year, traveled to Cambridge, England, during the summer of 2002. The Greensboro native said without the fellowship she might not have been able to travel abroad as a student. "I was so excited about the possibility of going abroad," Curtis said. "But I wasn't sure if I could afford it. The fellowship was perfect for me."

Her project involved studying the use of the ventricular assist device (VAD) at Papworth Hospital. Even though the machine has been approved in the United States, physicians in England are still testing the machine to see if it will be used there. Curtis said her experience at Papworth Hospital allowed her to learn more about the clinical side of medicine. "It was a unique adventure, especially as a first year student, to observe transplant and cardiology and to get a glimpse of the financing behind them."

In addition to studying the VAD machine, Curtis was also able to get a closer look at England's health care system. "I learned that England spends less than the United States on health care, and yet they are able to cover everyone in their country."

Curtis said now that she has learned about health care in England firsthand, she is looking forward to getting clinical experience at home and learning more about the American health care system. "It will be amazing to see what's the same and what's different."

Jatin Joshi was also a fellow in 2002. He spent the summer at Cambridge University working with an expert on the National Health Service.

Joshi examined the impact of privatization and

From left to right, Jim Lea, Cheryl McCartney, MD, Jatin Joshi, Bih Tabah, P. Lee Perkins, MD '77, Michele Curtis and Georgette Dent, MD.

more strict health care organization monitoring systems on the organizational structure of hospitals and the effects of proposed reforms on the efficiency of clinical care.

This year's fellow is Bih Tabah, who will travel to Geneva, Switzerland. She will work at the U.N. AIDS Office and evaluate the impact of HIV/AIDS on the socioeconomic development in African countries over the past two years. Tabah will also assist with analyzing data that has already been collected.

In order to apply for the fellowship, students have to come up with a project on their own and submit their proposals to the selection committee. "We expect the students to do a little background work," Piazza said. "During the interview process we want to make sure the student has come up with a feasible project."

Members of the selection committee are Piazza, Georgette Dent, MD, associate dean of student affairs; Jane McNeer, assistant dean and vice president of The Medical Foundation of North Carolina, Inc.; James Lea, PhD, professor of Family Medicine; and Tim Carey, MD, MPH, professor of General Medicine.

Once the committee makes its decision, the fellow then takes the lead in setting up the project. After the project is complete, the fellow submits an eight-page paper describing the experience to the Office of Student Affairs.

Curtis said she is already seeing the benefits of traveling abroad. "Now that I've seen health care in England, I already have something to add to conversations about health care." She added, "I'm so thankful that Dr. Perkins allowed me to have the opportunity. It was one of the greatest experiences I could have as a medical student."

Taking heart

Photos by Brian Strickland

Director of cardiac rehabilitation and women's heart programs sets an example for her patients by the way she chooses to live

By Rebekah Temple

Paula Miller, MD '83, swims four miles a week. Though she works 12-hour days, the cardiologist makes swimming a priority.

Swimming keeps her in shape and helps reduce stress, and beyond its health benefits, also allows Dr. Miller to lead her patients by example.

Dr. Miller is the director of the UNC Heart Center's Cardiac Rehabilitation Program and Women's Heart Program. Between both roles she sees patients daily. And since much of cardiovascular health centers around living healthy, Dr. Miller tries to be a model for her patients.

Hometown: Greensboro

Family: Husband, Stephen; sons, Jackson,19, and Nathaniel, 16

Personal Interests: Reading, traveling, fishing and baseball

Dr. Miller joined the faculty in a full-time capacity last October after she was recruited to develop and oversee the Cardiac Rehabilitation Program.

The Cardiac Rehabilitation Program focuses on cardiovascular disease prevention and rehabilitation, two areas Dr. Miller has focused on throughout her career. The patients referred to the program are deemed at risk for a cardiac event or actually have experienced such an event.

"We have established the cardiac rehab program to help patients reduce their risk factors through lifestyle modifications," Dr. Miller said.

Already, Dr. Miller has assembled a team of experts, including a dietician, exercise physiologist and psychologist who collaborate in caring for every patient. The three-month program requires patients to attend a monitored exercise session on Monday, Wednesday and Friday. From start to finish, every exercise session is 90 minutes and begins and ends with blood pressure and heart rate monitoring.

The first exercise session kicks off at 6:30 a.m., when Dr. Miller arrives at UNC's new Wellness Center at Meadowmont. In addition to encouraging patients, Dr. Miller reviews rhythms, answers questions and fulfills administrative responsibilities.

Currently, about 60 patients, mostly in their early 70s, are enrolled in the program. Only 12 patients were enrolled when the program began less than a year ago. And so far, more than 50 have graduated from the program, meaning these patients have met all established goals within the three-month duration.

Though Dr. Miller does not have to be convinced about the benefits of diet and exercise, she said studies have found that people who attend cardiac rehabilitation after a cardiac event get back to work faster than people who do not. Besides improving physical health, Dr. Miller says she has found from entrance and exit psychological evaluations an improvement in patient mental health. "What we see is an improvement in how people perceive themselves," she said.

When not overseeing the Cardiac Rehabilitation Program, Dr. Miller spends the other half of her time in clinic. On a typical day, she gets home from work around 6:30 p.m., and the evenings are spent with her family. "We eat dinner

together every night, though sometimes it might not be until eight o'clock."

Sometime between cooking dinner, spending time with husband Stephen, a 1985 graduate of UNC's law school and a Chapel Hill attorney, going to her youngest son's baseball games, teaching advanced cardiac lifesaving and helping with fundraisers for the East Chapel Hill High School Booster Club, Dr. Miller swims at least three times a week. "I use the time swimming to organize my life in my head," she said. In addition to swimming, Dr. Miller plays racquetball and does yoga.

She credits her best friend and colleague, Nancy Chescheir, MD '82, for holding her accountable for exercising. Though the two have different workout regimens, they meet one another at the gym at least two days a week. Dr. Miller highly recommends the buddy system to her patients when talking to them about exercise.

To her list of responsibilities, Dr. Miller recently added the Women's Heart Program. Knowing first-hand the challenges faced by women daily, Dr. Miller agreed to direct the program.

Though a definite date has not been set for her taking helm, Dr. Miller already has plans in mind for the program's future. She knows, however, that the job will not be easy given that only one-third of women realize that heart disease is their biggest risk.

Among her goals, Dr. Miller will focus on prevention and assisting the underserved. "Socioeconomic status is a big risk factor, especially in women," she said.

An around-the-clock caregiver, Dr. Miller understands the struggle women have between taking care of themselves and others. "But the truth is," she said, "if women don't take care of themselves first, they can't take care of anyone else."

Dr. Miller knows just how real the conflict is. While cleaning her son's room a couple of years ago, she went to open the window. When it would not open, she used her foot to try to dislodge it. Her foot slipped and she cut her Achilles tendon.

No one was home when the accident occurred, so Dr. Miller's neighbor drove her to the hospital. Though bleeding pretty badly, Dr. Miller remembers being consumed with the thought that she needed to leave a note for her family.

The incident gave her a new appreciation for

why women arrive at the hospital an hour later than men when having a heart attack. "I think women show up later because of their need to organize things before they leave home," Dr. Miller explained.

When counseling patients she tries to present lifestyle changes as non-threatening and non-abrupt. "You don't want to start out by telling them they can never have Ben and Jerry's again. They won't do it and you know they won't do it. So you present it to them in as an achievable goal."

Though Dr. Miller only joined the School of Medicine full-time last fall, she is not new to the faculty. She served as a part-time assistant professor prior to her full-time appointment as an associate professor.

Her faculty appointment had come from her association with the Orange Cardiovascular Rehabilitation Center, a nonprofit community program UNC was affiliated with for more than 20 years. While working in private practice, Dr. Miller served as co-director of the program from 1990 until she came to UNC last fall.

'What I am today'

Atlanta alumnus credits his School of Medicine education for a successful career – and a strong desire to give back

By Bernadette Gillis

Some physicians and scientists see the future of medicine in terms of advancements in technology and research. But George W. Cox, MD '66, considers the people behind the technology and research, particularly the medical students, who he says will have an encouraging affect on the future.

"Because of the people I've met who are in medical school right now, I think medicine is headed in a good and positive direction," he said. "If the core substance of medicine is reflected in these young people, it's going to be good."

In the hopes of helping medical students at UNC for years to come, Dr. Cox, a practicing neuroradiologist in Atlanta, has committed to a Loyalty Fund scholarship in his name. The four-year scholarship is just one of 30 Loyalty Fund scholarships that have been committed to through the Medical Alumni Endowment Campaign. The campaign hopes to endow 51 scholarships by June 2006. Dr. Cox contributes about $8,000 annually to activate the Cox Scholarship. The principal of the scholarship endowment will be funded by a charitable remainder unitrust.

Allyson Whyte, a second year student and the first recipient of the Cox Scholarship, said receiving the scholarship has helped her in many ways. "The scholarship really enabled me to make the decision to come to UNC," she said. "I won't have as much debt upon graduation. It has taken some of the pressure off regarding my future career choices."

In addition to financial help, the scholarship has allowed Whyte to find a mentor. "I write Dr. Cox letters to let him know what I'm doing," Whyte said. "He's great with advice."

Dr. Cox said he is happy the scholarship will help students like Whyte and the medical school as a whole. "I'm proud there's a George Cox Loyalty Fund Scholarship. Allyson Whyte is the kind of student we'd want to have at UNC."

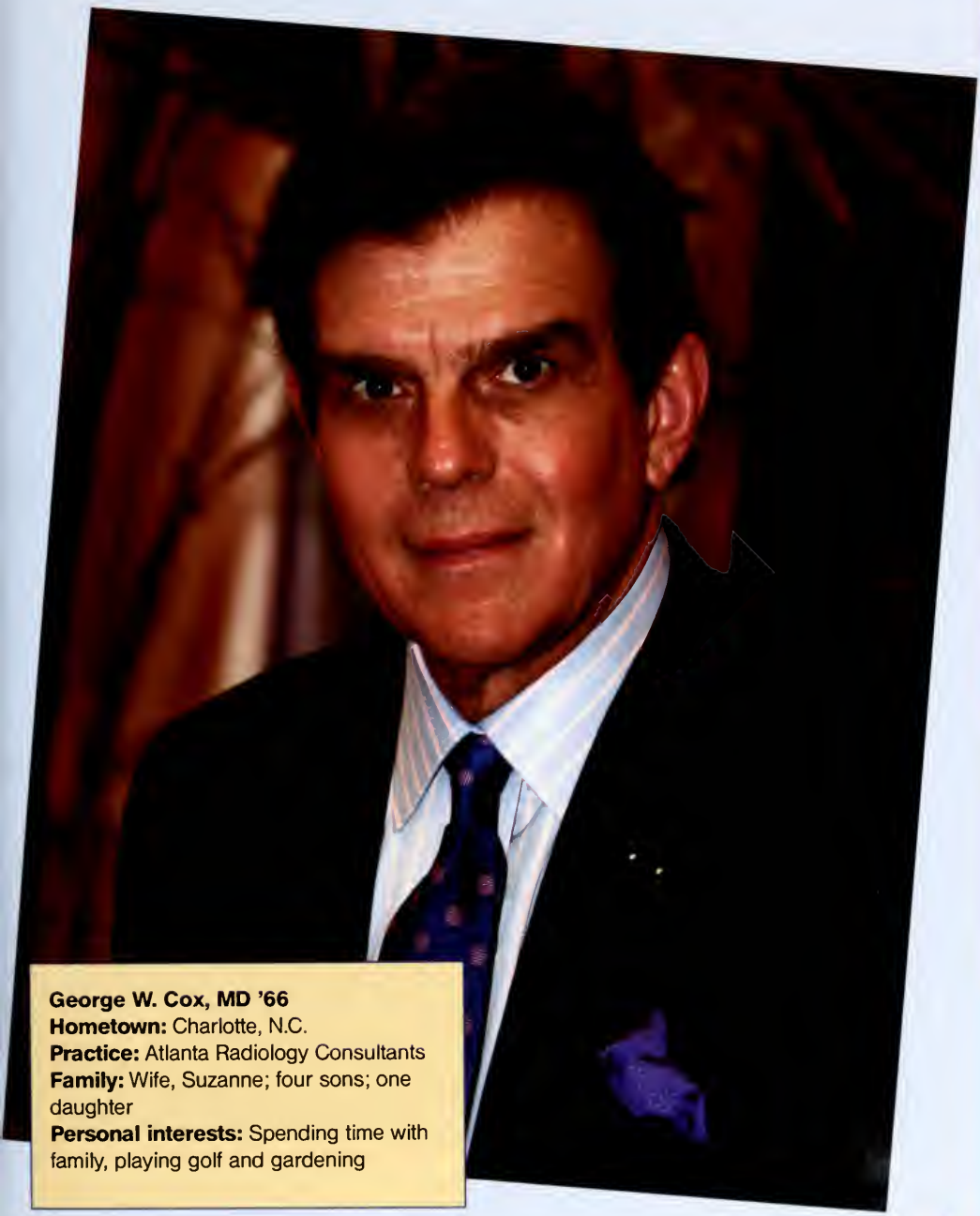
Dr. Cox's involvement with the Endowment Campaign extends beyond establishing a scholarship. He is co-chair of the campaign and is working to help the Alumni Association and Medical Foundation reach the campaign goal of $7 million. "We want to establish more scholarships, teaching professorships and research grants so we can attract the best and brightest to Chapel Hill," Dr. Cox said.

Perhaps Dr. Cox's passion for helping students comes from his longtime interest in teaching. During an interview for Duke medical school, he was asked what would he be if he could not be a doctor. Dr. Cox, who had received his undergraduate degree in English at UNC, told the interviewer that he would be a teacher.

"I think teaching and medicine are aligned disciplines," Dr. Cox said. "Teachers give and care for people, and so do doctors."

Even though Dr. Cox has focused primarily on practicing medicine, he did have the opportunity to teach for a few years. "I taught at Emory medical school for three years, and I enjoyed it immensely," he said.

Dr. Cox, a member of The Medical Foundation Board of Directors and president-elect of the Medical Alumni Association, said he is driven by a need to give back to the school that gave him so much. "I think a great deal of what I am today, I owe to the University of North



George W. Cox, MD '66
Hometown: Charlotte, N.C.
Practice: Atlanta Radiology Consultants
Family: Wife, Suzanne; four sons; one daughter
Personal interests: Spending time with family, playing golf and gardening

Carolina medical school. Not only did it educate me, but it also gave me a sense of value. The success I've had in medicine I can trace directly back to UNC."

Beginning in 1994-1995, Dr. Cox initiated a Greater Atlanta Loyalty Fund Campaign to increase annual support and participation. For six years he chaired the effort solo and hosted many dean's receptions in his home. He continues as a steering committee member in this annual effort, where donor participation has doubled since his involvement.

> "I think a great deal of what I am today, I owe to the University of North Carolina medical school. Not only did it educate me, but it also gave me a sense of value."

For the past 28 years Dr. Cox has successfully practiced radiology, currently at Atlanta Radiology Consultants, which is part of St. Joseph's Hospital. His main focus as a neuroradiologist is on the imaging and treatment of diseases of the brain and spinal cord.

Over the years, Dr. Cox said he has been amazed by all of the rapid technological changes in radiology. He said, "Probably 80 to 90 percent of the things that I do from a technology standpoint did not exist in 1975 when I finished my medical training."

Advances in technology, such as the development of magnetic resonance imaging and ultrasound, have allowed him and other radiologists to better treat patients, he said.

"I perform angiography, which involves using catheters and putting them in the brain. It's a different

Photos by Brian Strickland

George W. Cox, MD '66, greets Allyson Whyte, the Cox Loyalty Fund Scholar and Bill Wood, MD '56 at the April 4th Spring Medical Alumni Weekend banquet.

Wesley C. "Butch" Fowler, Jr., MD '66 receives the Distinguished Faculty Award from Dr. Cox at the Spring Alumni Banquet.

procedure that we're able to do with catheters that now allows us to better treat aneurysms and strokes. We now have better catheters and better imaging machines and can use the machines to go in and do non-surgical treatment for aneurysms and strokes."

Even with all the new machinery and technological advancements, Dr. Cox said direct contact with patients is the best part of his job. "It's great when you get to have true human contact with somebody, and hopefully that contact will make things better for them."

He added, "My biggest goal is to have the best radiology department that I can possibly have and to best serve my hospital and patients."

Dr. Cox wasn't always sure of his passion for radiology. When he completed medical school in 1966, he thought he would become an internist. He started his residency at the University of Virginia, but discovered that he didn't have a passion for internal medicine. The decision to leave UVA, landed in him in Vietnam in 1968.

"At that time there was a doctor's draft," Dr. Cox said. "There was a plan called the Berry Plan, and you were protected from being drafted until you finished your specialty. I was doing internal medicine at the University of Virginia, and I realized that was not what I wanted to do. So I resigned from the Berry Plan and was drafted. Next thing I knew I was in Virginia standing in my underwear surrounded by military doctors."

After spending 13 months serving his country in Vietnam, Dr. Cox admits that returning home was difficult. He decided to take some time away from medicine and travel Europe. But his decision to get away, actually led him back on the road to medicine.

"The reason I got interested in radiology was because when I was living in Europe every time I met someone – whether I was skiing or sitting in the café – every time I met a doctor, he was a radiologist. I met a lot of great people. I knew then that I wanted to do radiology."

With a new specialty in mind, Dr. Cox returned to the United States in 1971. He chose Emory University to complete his residency and internship in radiology. He decided to make Atlanta his home.

Even with all of his accomplishments as a physician and his dedication to giving back to UNC, Dr. Cox remains modest. "There are plenty of people like me in our medical community who love Chapel Hill," he said. "We're just trying to reinvest ourselves in this really wonderful university. I'm just one of several thousand."

'An **honor** and a **privilege** to **serve**'

Being "called up" is nothing new to Lt. Col. Margaret Nusbaum, DO, of Womack Army Medical Center at Fort Bragg, N.C. and UNC Health Care Family Practice. She was mobilized in January 1996 in support of Operation Joint Endeavor (Bosnia) – three months after shifting from active duty to the reserves.

UNC Health Care caregivers and staff are called into duty during a time of war to provide their services to the military

By Tom Maltais

A volunteer nods to another as they pass each other in the hallway. One is pushing a cart, the other is making his rounds, offering his services wherever they are needed. Both are retired, older gentlemen, with thin waists and closely cropped hair. Their exchange is nothing extraordinary except that it is between one man who has been awarded the Purple Heart five times and another who has parachuted into combat in three different wars.

Scenes such as this remind you that while you are walking the halls of a hospital, you are within something much bigger. Both volunteers are willing to take a moment to share a story and perhaps show off a scar or two. Regardless of whether the story being told is about combat or training, their experiences boil down to one constant – personal sacrifice.

Lt. Col. Margaret Nusbaum, DO, currently cares for soldiers who may one day have war stories of their own to share. She is one of many caregivers who,

as a member of the U.S. military reserves, had to temporarily leave UNC Health Care for deployment to bases around the world. For 22 years, Dr. Nusbaum has served in the U.S. Army Medical Corps, from 1981 to 1985 as a reservist, from 1985 to 1995 on full active duty and since 1995 as a member of the reserves. She recently had to leave UNC Hospitals Family Practice to backfill the Family Practice residency-training program at Womack Army Medical Center at Fort Bragg, N.C., in support of Operation Noble Eagle.

"I joined the military not only because of the scholarship for medical school, but because the training seemed ideal for a family physician," said Dr. Nusbaum, who has recently been promoted to colonel. "I did my residency training in the army and really enjoyed being a part of the 'Army family.' I've been able to consistently serve as a reservist with the support from my patients, the UNC faculty and residents and even more so, my husband."

With some 400 members of the medical staff at Womack deployed overseas, Dr. Nusbaum has stepped in to deliver babies, assist residents or perform procedures such as vasectomy, flexible sigmoidoscopy, obstetrical ultrasounds, exercise treadmill and biopsies. She also teaches in lecture or seminar format for residents, staff and medical students.

While she hasn't had the opportunity to care for soldiers returning from the conflicts in Iraq or Afghanistan, she has in the past cared for soldiers recovering from combat wounds, including Gulf War Syndrome. Her typical workday begins at 6:30 a.m. with sick call. At Fort Bragg she cares for a large number of soldiers serving in the Army's elite 82nd Airborne and Special Forces, which can present its unique set of challenges.

"These are extremely tough individuals," she said. "They can be very stoic when it comes to discussing their level of pain. At the heart of it is that they want to be with their units and not in a hospital."

Anglo Price

A small example of this level of commitment is displayed just outside the hospital's front door. A few soldiers with some time to kill are running through the steps involved in properly presenting their unit's flag while in formation. They repeat these steps several times in a 10-minute span. The execution of these steps will never lead to a mention on the evening news or warrant a medal for valor, but when they are finished the soldiers smile with satisfaction that they are prepared to do their job right.

A little over 100 miles east of Fort Bragg, Marine

During this mobilization Lt. Col. Nusbaum, who has recently been promoted to Colonel, has noticed an increase in the number of stress-related injuries and illnesses presented by soldiers and their families.

Staff Sgt. Anglo Price takes the same measure of satisfaction in the performances of his duties, but as with any good marine — he won't let you see him smile. When he finishes his deployment to Camp Lejeune in support of Operation Enduring Freedom, Price will return to his role as an assistant supervisor with UNC Hospitals' Medical Information Management department.

"I imagine it will take a short period of adjustment when I return to Chapel Hill," he said. "The level of responsibility I have as a Marine is considerably greater. I'm responsible for hundreds of thousands of dollars of equipment and government property."

As company gunnery sergeant, 2nd Supply Battalion, Price is responsible for ensuring the maintenance and proper utilization of company property and billeting facilities. During his typical 13-hour workday, he is also responsible for the day-to-day administration and disciplinary functions of a company of 265 marines.

As with most military reservists, prior to his mobilization, Price's service was done one weekend a month and two weeks a year. His weekends typically included training in his occupational specialty as well as physical training. The weekends also alternated between frequent visits to outside training areas to perform land navigation techniques, patrolling operations and weapons training.

It's during these training exercises in the woods or on post at Lejeune when the workday enters its 17th hour that Price notices the primary difference between military and civilian workplaces.

"Regardless of how hard things get, in the military you put aside your personal issues in support of the achievement of mutual goals," said Price.

The practice of this kind of subservience is personified in the daily actions of Navy Petty Officer 2nd Class Kathy MacGregor. As a hospital corpsman at National Naval Medical Center in Bethesda, Maryland, MacGregor has taken a step back in her normal duties as a caregiver in support of a common goal.

"At UNC Hospitals I work as a nurse manager in Neurosurgery ICU and Surgery Trauma ICU," she said. "My responsibilities at Bethesda require me to support the registered nurses along with our servicemen and women and their loved ones. I can do everything a nurse can do except administer narcotics or push I.V. medications."

MacGregor is currently a Canadian citizen awaiting U.S. citizenship to receive her commission and in turn an expansion of her responsibilities. She has been in the naval reserves for four years and was mobilized in support of Operation Noble Eagle with unit 1209 out of Camp Lejeune. She serves at Bethesda along with 600 other reservists used to augment staff who went to sea with the US-NS Comfort.

Sailor, soldier and marine alike, each serviceman and woman agreed that they are looking forward to returning to Chapel Hill and that they never forget their comrades serving overseas.

"One thing you'll notice in the military is that when one of us is referred to as a 'hero,' to a person, we can find someone else in uniform who we think is more deserving of the praise," Dr. Nusbaum said. "Even though I'm in the same state I am looking forward to getting back to UNC. I can only imagine the pile of paperwork that's waiting for me. I'm also not looking forward to thinking about what to wear everyday – the uniform is much easier."

Clothing issues aside, her commanding officer, Colonel David Maness expressed his respect for the role reservists play in the support of our country, "Approximately 70 percent of those in the army's medical fields are reservists. They're value cannot be understated, especially in times of national emergency." Maness, who is a graduate of the Faculty Development Fellowship in Family Medicine at Chapel Hill from 1987 to 1988, has known Dr. Nusbaum since she was a medical student and intern at Fort Gordon, Ga.

"This country was built on sacrifices such as those put forth by people such as Lt. Col. Nusbaum," said Maness. "I think most reservists would agree that despite the hardship it may bring, they consider it an honor and a privilege to serve."

David Weber, MD, MPH, right, with media.

Preparing for bioterrorism

The School of Medicine cosponsored a bioterrorism media briefing March 24. The briefing, organized in conjunction with the Schools of Public Health and School Journalism and Mass Communication, addressed North Carolina's preparedness for a bioterrorism attack. Christopher Baker, MD, professor of surgery, and David Weber, MD, MPH, professor of medicine, were among those who spoke at the briefing. Additional speakers included Bill Roper, MD, MPH, dean of the School of Public Health, and Leah Devlin, state health director. Here, Dr. Weber answers questions from the media.

A new **dimension**

3-D computer program helps athletes improve techniques – and even predict performance

By Joy Buchanan

Though a well-timed discus throw or the powerful leap of a successful long jump might seem the product of muscle strength and pure athletic talent, a UNC researcher says each actually is the product of mechanics, geometry and science.

Bing Yu, MD, has developed a software program that captures an athlete's every move and turns it into three-dimensional computer animations that can help the athlete throw farther or jump longer distances.

We analyze the biomechanics of their techniques to see what the problems are and how they can improve their performance," said Dr. Yu, associate professor of physical therapy at UNC's School of Medicine and a member of the university's Center for Human Movement Science.

Dr. Yu developed the computer program for the elite discus throwers of USA Track & Field, the national governing body for track and field, long-distance running and race walking. He uses two high-speed cameras to videotape an athlete during training or a competition. The videos are calibrated and digitized. Once he combines the data from the two cameras, that information is put into a computer program that generates a 3-D image of the athlete's movements.

Dr. Yu's animation program will soon have a prominent spot in the new National Track & Field Hall of Fame in New York City. The animation was selected for the exhibit, "What Makes A Champion?" Visitors to the museum will watch 3-D figures glide across a screen, displaying the biomechanics of world-class athletes.

"It's a beautiful piece," said Keats Myer, project manager for the hall of fame. The animation will help visitors, especially children, understand how their movements influence their performance, she said. The grand opening for the hall of fame and biomechanics exhibit is scheduled for January 2004.

Dr. Yu's 3-D movement images are black and white polygonal figures that jump, turn and throw as the athletes do. The figures allow Dr. Yu and the athletes to see the exact placement of critical body landmarks, such as feet, shoulders and hips. The image can be tilted or rotated to view from infinite angles.

Dr. Yu can use the image to find the technique or motion factor most strongly related to an athlete's performance, he said. Dr. Yu also can compare the movements of two different athletes to determine what an athlete can do to mimic the performance of a better athlete.

According to Dr. Yu, the computer animation allows athletes and trainers to use science where they once relied on trial and error and a lot of luck.

"Athletes used to guess how to improve their techniques," he said. "You could say if you change this, maybe you'll have a better outcome. But now we can pinpoint where the problem is. Our program makes the whole process more scientific."

And it works.

In November 2001, Olympic discus thrower Suzy Powell's best throw was 65 meters. She went through the biomechanical analysis process with Dr. Yu, and he made recommendations specific to her techniques. Just five months later, in April 2002, at the University of California at San Diego Open, Powell threw a record 69.4 meters or 227 feet. That was 25 centimeters better than the record set in 1986.

"My first non-reverse throw was around 217 feet. My second throw was a reverse at 227," Powell said. "His evaluation of my potential distance was right."

Dr. Yu can also predict an athlete's performance using his recommendations. At the 1992 Barcelona

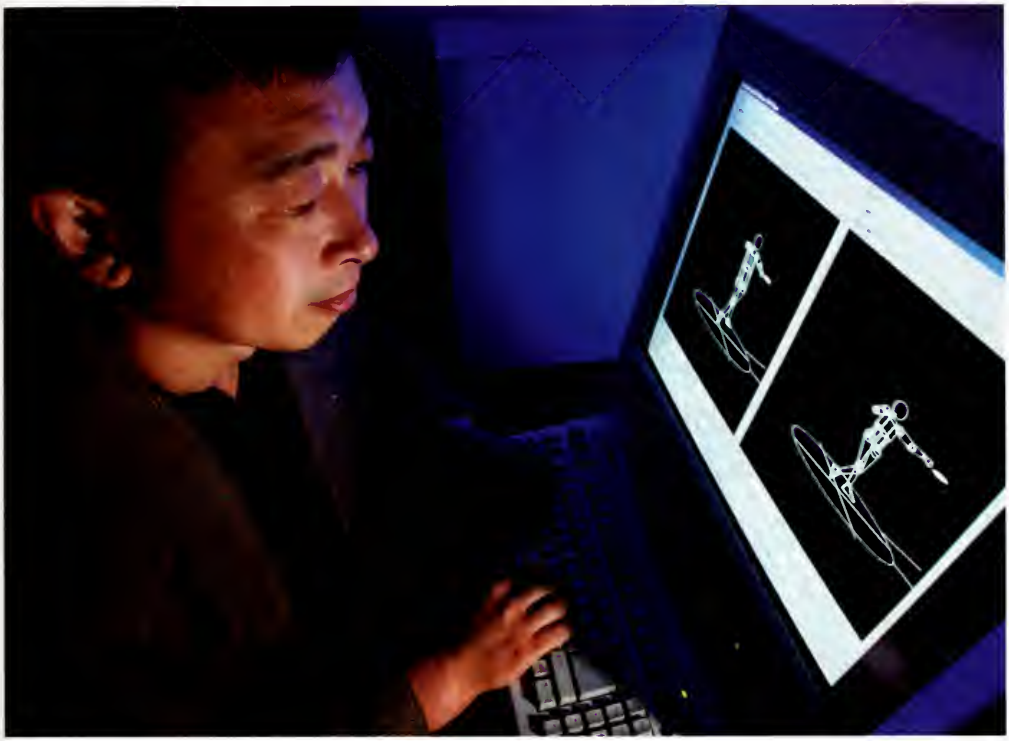


Photo by Brian Strickland

Bing Yu's computer program helps athletes. "Our program makes the whole process more scientific," he said.

Olympics, Dr. Yu and his team predicted that the winning men's triple jump would be about 18.30 meters. Mike Connolly, a U.S. athlete who used the researcher's recommended technique, won the event with a jump of 18.25 meters.

Dr. Yu also predicted the winning men's triple jump at the 1996 Atlanta Olympics would be 18.11 meters. Kenny Harrison, a U.S. athlete, won with an 18.09 jump.

Dr. Yu said understanding how we move is not just important to athletes. The animation program will help UNC researchers examine movement for medical treatment and therapy.

"Our understanding of human movement is very limited," he said. "We are studying human movement right now to determine how to use movement to prevent injuries and treat injuries."

Imaging courtesy of Bing Yu

Arthur S. Aylsworth, MD, professor of Pediatrics and Genetics and chief of the Pediatric Division of Genetics and Metabolism, has been elected to serve on the board of directors of the American Board of Medical Genetics for a six-year term.

Jarrett Barnhill, MD, professor of Psychiatry, was appointed by N.C. Gov. Mike Easley to the state Commission on Children with Special Health Needs. Dr. Barnhill has also been appointed to the editorial board of *Mental Health Aspects of Developmental Disabilities.*

William S. Blau, MD, PhD, associate professor of Anesthesiology, was named an "exceptional practitioner" in a recent issue of *Good Housekeeping*. Dr. Blau is in charge of UNC Hospitals' Anesthesiology Pain Management Center, which was named as one of "35 Top Pain Centers" by the magazine. Dr. Blau's special interests include management of chronic, cancer and acute pain. UNC Hospitals' pain center is one of two in North Carolina, and the only one in the Triangle that was included on the magazine's list.

BLAU

Wesley Fowler Jr., MD '68, associate chair of Obstetrics and Gynecology and professor and chief of Gynecologic Oncology, recently received the Medical Alumni Association's Distinguished Faculty Award. The award is given in recognition of service to the practice of medicine, excellence in teaching and leadership in the School of Medicine and outstanding service to the alumni and to the people of North Carolina.

Jeffrey A. Frelinger, PhD, chair and Kenan Professor of Microbiology and Immunology, received a Distinguished Service Award from the American Association of Immunologists. Dr. Frelinger was recognized at the AAI's 90th anniversary annual meeting in Denver, Colo., for outstanding leadership in public affairs for the AAI and for service as chair of the public affairs committee.

Paola Gehrig, MD, assistant professor of Gynecologic Oncology, received a Junior Faculty Development Award from the University of North Carolina Committee on Faculty Research and Study Leaves. The $5,000 award is for the period of Jan. 1 through Dec. 31, 2003.

GEHRIG

Michael Giddings, PhD, assistant professor of Microbiology and Immunology, recently received a $5,000 award from the Medical Alumni Endowment fund, to support his work, "Differential proteomic analysis to identify compensatory mutations in antibiotic resistant bacteria."

Robert Golden, MD, professor and chair of Psychiatry, has been named recipient of the American College of Psychiatrists Mood Disorders Research Award. The award is presented annually to honor individuals who have made major contributions in the understanding and treatment of mood disorders. Dr. Golden was recognized at the American College of Psychiatrists annual meeting and 40th anniversary celebration, at which time he presented a featured lecture on "Serotonin and Depression: From Basic Psychobiology to Clinical Relevance."

Adam Goldstein, MD, associate professor of Family Medicine, received the first Ned Brooks Award for Public Service, which will annually recognize a UNC faculty or staff member who has built a sustained record of service to the community through their own efforts and through their involvement and guidance of others. The award is named for Brooks, a faculty member and administrator at Carolina since 1972. The recognition was a part of the Carolina Center for Public Service's annual awards program.

Fred Jarskog, MD, assistant professor of Psychiatry, was elected Associate Member in the American College of Neuropsychopharmacology.

Nancy Klauber-DeMore, MD, assistant professor of Surgery, received the Sidney Kimmel Scholar Award for Translational Cancer Research for her project titled, "Genetic Regulation of Human Breast Cancer Dormancy." The Sidney Kimmel Foundation for Cancer Research is dedicated to improving basic understanding of cancer biology and to developing new methods for the prevention and treatment of cancer. The foundation principally supports research programs that emphasize novel or innovative treatment strategies.

Jeffrey Lieberman, MD, distinguished professor of Psychiatry and vice chair for Research and Scientific Affairs, was announced by Trey Sunderland, MD, president of the Society of Biological Psychiatry, as the 2003 president-elect. The society is the major professional organization representing the discipline of psychiatric neuroscience in the field of medicine. One of its various goals is to define the research agenda for mental illness, inform the clinical practices of psychiatry and contribute to the development of future generations of investigators and psychiatric neuroscience. Dr. Lieberman will assume the position of president in May 2004.

Erin Malloy, MD, assistant professor of Psychiatry, recently received the Nancy Roeske Excellence in Medical Student Education Award from the American Psychiatric Association at the annual meeting in San Francisco.

Matthew Mauro, MD, professor and vice chair of Radiology, is currently serving as the associate editor for Radiology and Seminars in Interventional Radiology. He is also the chairman of the Cardiovascular and Intervention Radiology Research and Education Foundation and chaired a national think-tank on interventional oncology. Dr. Mauro was recently elected chair of the American College of Radiology's Commission on Interventional and Cardiovascular Radiology. He also serves on the ARC's practice expense committee. He will serve on the Board of Chancellors from 2003-2009.

Travis Meredith, MD, chair and Sterling A. Barrett Distinguished Professor of Ophthalmology, recently served as guest speaker at the West Virginia Ophthalmological Society at the Greenbrier in White Sulphur Springs, W.Va.

MEREDITH

MOISE

Kenneth Moise, MD, professor and chief of Maternal-Fetal Medicine, is now the president of the International Fetal Medicine and Surgery Society and recently gave a presentation at the society's meeting in Zermat, Switzerland.

Karen Moller, MD, instructor of Obstetrics and Gynecology, was awarded "Best Fellow Paper" at the Mid-Atlanta Gynecologic Oncology Society Meeting. Her paper was titled, "Stage IV Uterine Serous Carcinoma: Is there a survival advantage to optimal surgical debulking?"

Kean Oh, MD, assistant professor of Ophthalmology, was recently named the Payne Stewart Fellow from the Foundation Fighting Blindness.

Etta Pisano, MD, FACR, professor of radiology and chief of breast imaging and co-leader of the UNC Lineberger Breast Cancer Program, will serve as a medical collaborator on a grant to develop a computer-aided-diagnosis system to assist radiologists in interpretation of MRI images of the breast.

Dr. Pisano was selected for the AAMC Executive Leadership in Academic Medicine fellowship. Also, she is now serving as president of the Association of University Radiologists.

Myra I. Roche, MS, CGC, associate professor of Pediatrics in the division of Genetics and Metabolism, has been selected as one of seven fellows by the UNC Chapel Hill Ethics Program of the Institute for the Arts and Humanities for 2003-2004. The fellowship is intended to allow faculty to pursue special projects of their own design, to foster a community of ethics teachers and scholars, to promote the introduction of ethical principles into courses across campus and to engage in research and public service that benefit the people of North Carolina. Her project involves creating a collection of case based scenarios, derived from her clinical, committee, and teaching experiences, that illustrate ethical dilemmas arising from the delivery of genetic information.

Kathy Trotter, MSN, CNM, FNP, instructor of Family Medicine, received a community award from the March of Dimes. The award of $1,375 will serve as seed money for an innovative pilot of Centering Pregnancy, a model of group prenatal care. The project has already started and has been well received at the Family Practice Center.

William E. Whitehead, PhD, professor of Medicine, received the Senior Investigator in Clinical Science Award from the International Foundation for Functional Gastrointestinal Disorders on April 7. Dr. Whitehead's research addresses the causes and treatment of irritable bowel syndrome, constipation and incontinence.

WHITEHEAD

WINZELBERG

Gary Winzelberg, MD, MPH, assistant professor of Medicine, was recently chosen as one of four new geriatric professionals nationwide to receive the prestigious Brookdale National Fellowship. Dr. Winzelberg, the first at UNC to receive this honor, will use the awarded funds to expand his research in improving communications between physicians and surrogates in end-of-life care decision-making.

John D. Wright Jr., MD, associate professor of Ophthalmology and Pediatrics, was recently appointed as the American Academy of Ophthalmology representative to the American Registry of Pathology.

Yi Zhang, PhD, assistant professor of Biochemistry and Biophysics and a member of the UNC Lineberger Comprehensive Cancer Center, has been awarded the American Association of Cancer Research's 2003 Gertrude B. Elion Cancer Research Award. The honor is awarded to only one tenure-track assistant professor nationwide and carries a $50,000 grant given to the most meritorious laboratory, clinical and transnational young research scientist.

Dr. Houpt to step down as School of Medicine dean

On May 19, Jeffrey L. Houpt, MD, announced that he will resign as dean of the UNC School of Medicine and chief executive officer of the UNC Health Care System by next May after completion of a national search for his successor.

Dr. Houpt served 14 years as medical dean at two major universities – UNC and Emory – making him among the nation's longest-serving medical school deans.

He was named medical school dean and vice chancellor for medical affairs at UNC in June 1997, and one year later was appointed chief executive officer of the UNC Health Care System by the UNC Board of Governors. In 2000, Rex Healthcare was purchased, making UNC Health Care one of the area's largest health systems. With the opening of the N.C. Children's and N.C. Women's Hospitals, UNC Health Care has become the leader in women's and children's specialty care.

"Dr. Houpt has been essential to the creation and development of the UNC Health Care System and its growing importance to the state," said Molly Broad, president of the 16-campus University of North Carolina. "He has advocated tirelessly on behalf of quality health-care delivery for all North Carolinians and UNC's historical role in fulfilling its attainment."

Said Chancellor James Moeser, "Jeff Houpt has positioned Carolina as a national leader in medicine and life sciences research. And he has done that with a constant focus on serving the State of North Carolina – through the education of future medical leaders and through research and health care that improves all of our lives."

During the dean's six years at UNC, 23 department chairs and center directors were recruited. Among newly created units were a genetics department and the Carolina Center for Genome Sciences, which draws its membership from the entire university with an investment in growth and development of $245 million. National Institutes of

Health funding to the medical school more than doubled during Dr. Houpt's tenure, exceeding $190 million in fiscal year 2003. Steady improvements in medical school aptitude test (MCAT) scores of matriculating students occurred, as well as significant gains in student selectivity.

The revitalization of the medical school's physical plant was another major accomplishment during this period. A complete renovation plan for the 1 million square feet of existing medical school space was put in place. New construction of 600,000 square feet for research and 100,000 square feet for office space was begun, with construction to be completed by 2008. Since October 2001, new buildings constructed and dedicated on the medical campus include the Neuroscience Research Building, Bioinformatics Building and the Biomolecular Research Building.

Before coming to Carolina, Dr. Houpt was dean of Emory University School of Medicine, where, from 1983 to 1988, he had been professor and chairman of the department of psychiatry. At Emory, he rapidly developed new clinical and research programs to address the field's growing emphasis on biology and neuroscience. During his tenure as dean

until 1996, federal research funding doubled and the school's rank in NIH-funded research improved dramatically, from 38th to 20th among accredited U.S. medical schools. Emory's medical school endowment also doubled, as did space available for research.

A board-certified psychiatrist, Dr. Houpt has advised or served on committees for the National Cancer Institute, the National Institute of Mental Health, the National Academy of Sciences, the American Psychiatric Association, the Association for Academic Psychiatry, the American College of Psychiatrists, the Association of American Medical Colleges, the American Board of Psychiatry and Neurology and the Accreditation Council for Graduate Medical Education.

He has been awarded numerous professional honors and has served as editorial consultant and editor for several scientific journals, including the Journal of the American Medical Association and the American Journal of Psychiatry. He is past president of the American College of Psychiatrists. The author of four books and co-author of more than 60 scientific articles, Dr. Houpt has served as principal investigator for National Institute of Mental Health studies.

— UNC News Services

Health Sciences Library helps launch Web site that gives residents access to resources

UNC's Health Sciences Library, in collaboration with the School of Information and Library Science, launched a Web site in December giving North Carolinians access to health resources throughout the state.

The initiative, called N.C. Health Info, links health services with health topics. Working in conjunction with MEDLINEplus, a Web-based health information service of the National Library of Medicine (NLM) and the National Institutes of Health, N.C. Health Info is able to combine credible health information with local health services, providers and programs.

The first of its type in the nation, the Web site has received the support of U.S. Rep. David Price and Sen. John Edwards. "It doesn't surprise me that North Carolina is the first to have this," Price said at the site's public introduction.

Held Jan. 14 at the Pittsboro Memorial Library, the site's unveiling also was attended by state Rep. Joe Hackney and Donald Lindberg, MD, director of the NLM, among others.

According to Christie Silbajoris, project director of N.C. Health Info, the Pittsboro Memorial Library was selected for the site's debut because of its location. "For those of us living in more urban areas, it is easy to forget that North Carolina is a rural state and that for many people, health information and resources are not readily available. One of the primary goals of the site is to make information and resources easily assessable to all North Carolinians," she said.

The site received 20,000 visits during January. But though operational, it is not nearly complete, Silbajoris said. Currently, the site links to more than 1,800 resources around the state, which is only a fraction of the number of anticipated sites that it eventually will be linked to.

Since MEDLINEplus covers more than 600 health topics and North Carolina has 100 counties, Silbajoris and Peggy Hull, the former project director, had to determine the Web site's scope. They decided, at the beginning, to focus on finding resources corresponding to eight of the 12 North Carolina 2010 Health Objectives. These objectives, determined by a governor-appointed committee, set an agenda for improving the health of North Carolinians during the first 10 years of the new millennium.

One of the objectives addresses decreasing infant mortality by reducing infant death and low birth weight, as well as improving maternal health behaviors during pregnancy. Silbajoris and others have taken health topics falling under this objective and found resources around the state. For example, the site makes it possible for an expectant mother in Brunswick County to find local resources addressing pregnancy and substance abuse, which is in addition to the general health information provided by MEDLINEplus.

One challenge, according to Silbajoris, is finding those resources that serve the smaller communities. Another challenge, she said, is making sure that information is available for key resources, such as hospitals and health departments. In the cases where a crucial resource does not have a Web presence, N.C. Health Info has provided the contact information.

Silbajoris encourages users of the site to recommend resources. So far, about 80 resource links have been suggested by users, many identifying themselves as health care professionals. In addition to health care professionals, Silbajoris hopes public librarians will use the site and refer people to it for health information.

Founded two years ago, the initiative grew out of the vision of the director of the Health Sciences Library, Carol

Jenkins. Realizing the need for health information relevant to North Carolina, Jenkins, Joanne Gard Marshall, PhD, dean of the School of Information and Library Science, and Diana McDuffee, network director for the North Carolina Area Health Education Centers library and information services, went to the NLM with the proposal to supplement MEDLINEplus' information with resources specific to North Carolina.

The NLM accepted the proposal and granted the project funding. A feasibility study was conducted the first year, and the second year was spent compiling the information for the site's debut, chronicling every step so that it may be duplicated by other states.

"We are very excited about the potential N.C. Health Info has to provide North Carolinians with information about their local health services. We feel that N.C. Health Info can assist people in finding the resources that are truly right for them," Silbajoris said.

To find out more about N.C. Health Info, go to www.nchealthinfo.org.

—Rebekah Temple

Psychiatry receives $3 million schizophrenia award

The UNC Department of Psychiatry has received a five-year $3 million award from the National Institute of Mental Health to promote the early detection and prevention of the brain disorder schizophrenia.

This award comes on the heels of a five-year, $9.3 million grant from the National Institute of Mental Health to form the Silvio O. Conte Center to study the onset of schizophrenia at UNC's Department of Psychiatry. One component of the center, the PRIME (Prevention through Risk Identification Management and Education) Clinic, will focus on the comprehensive study of the prodromal phase of schizophrenia.

"These efforts highlight the importance the National Institute of Mental Health has placed on the prevention of mental illness," said Diana Perkins, MD, associate professor of Psychiatry and director of the PRIME Clinic. "This is a progressive area of research for the neuroscience of mental disorders with ambitions not just for more effective treatments but also the possibility of the prevention of schizophrenia altogether."

Photos by Brian Strickland

Doctors speak out
Jeffrey L. Houpt, MD, top left and at podium, helped lead the charge when hundreds of physicians recently descended on the legislative building to lobby for medical malpractice reform. "Why are we here?" Dr. Houpt asked. "We are here today because there is a crisis occurring in health care."

The symptoms of schizophrenia can occur suddenly but more commonly take months or years to develop. Prior to the onset of schizophrenia, patients and their family members describe subtle changes in feelings thinking and behaviors that are classified as Prodrome, or basic symptoms. These symptoms range from descriptions of poor attention, distractibility, ideas of reference, suspiciousness, unusual thinking, perceptual abnormalities, emotional/affective blunting, diminished motivation, depressions, anxiety and irritability.

"These symptoms are often accompanied by a change in behavior such as decline in functioning at school or work, social withdrawal, impaired hygiene, aggressive behaviors or suicidal ideation," Dr. Perkins said.

The research is complicated by the fact that not all people experiencing such symptoms will progress to schizophrenia. Previous research in this area suggested that about half of people experiencing basic symptoms will progress to psychosis. Sometimes these symptoms may be the early warning signs of another psychiatric disorder such as an anxiety disorder or depression, substance abuse, another medical disorder that affects brain functioning or part of a normal adolescent crisis.

Through this study, specific prodromal symptoms and risk factors will be identified and evaluated to attempt to distinguish what is different about those who progress to psychosis and those who do not. Through examining this distinction, researchers aim to increase their ability to define a prodromal state that is highly predictive of a subsequent psychotic illness.

"The better we become at identifying diagnostic and prognostic indicators the better we will be at developing early intervention strategies to delay the onset or quickly treat at the earliest onset of symptoms," said Jeffery Lieberman, MD, director of the university's Mental Health Clinical Research Center and Principal Investigator on the study.

Research tools used during the study will include diagnostic interviews and symptom severity measures to assess and track changes over time; specific neurocognitive tasks to measure attention, memory, concentration and sensory deficits and nueroimaging procedures that will look at any variances in the structure of the brain as well as the functional neuranatomy of the brain to observe specific areas of activation, information selection and sensory filtering when paired with specific tasks or images.

"One of our greatest challenges will be getting the word out to the community and other health care providers to help us identify people who may be experiencing these types of symptoms," Dr. Perkins said. "Many people experiencing such changes are aware that something may be wrong but due to stigma or lack of information will keep their concerns to themselves."

For more information, contact the PRIME clinic at (919) 843-7746 or (877) PRIME19 or visit www.prime.unc.edu.

Seattle, New York researchers receive neuroscience prize endowed by UNC scientist

UNC has named Drs. Linda Buck and Richard Axel co-recipients of the third annual Perl-UNC Neuroscience Prize.

Dr. Buck is a member of the basic sciences division at the Fred Hutchinson Cancer Research Center in Seattle and affiliate professor at the University of Washington. Dr. Axel is a UNC professor of biochemistry and molecular biophysics at Columbia University. Both scientists are Howard Hughes Medical Institute investigators.

The prize carries a $10,000 award and is given to recognize a seminal achievement in the field of neuroscience. Previous awardees were Dr. David Julius from the University of California at San Francisco and Dr. Roderick MacKinnon from Rockefeller University.

Dr. Edward R. Perl is Sarah Graham Kenan professor of cell and molecular physiology at the UNC School of Medicine. Dr. Perl's work in pain mechanisms has been highly influential. Thirty years ago, he was the first to prove that a particular class of nerve cells (now called nociceptors) responds exclusively to stimuli that are perceived as painful. His work has had a decisive impact on modern pain research, and these cells are now targets of intensive efforts to find drugs that block their function.

"This year's Perl Prize is awarded to Drs. Axel and Buck in recognition of their discovery of the family of olfactory receptor proteins. Until their pioneering work, almost nothing was known about how specialized nerve cells in the olfactory epithelium of the nose differentially respond to the myriad odors that humans and animals can distinguish," said William Snider, MD, director of the UNC Neuroscience Center and head of the selection committee for the prize.

The discovery of a family of approximately 1,000 odorant receptors has made it possible to understand how olfactory receptor neurons respond to odors and how information about odors is conveyed to the brain, Dr. Snider said. The discovery has vastly expanded the sub-field of neuroscience

devoted to understanding the sense of smell.

The award was presented by Jeffrey Houpt, MD, dean of the School of Medicine, on May 2. Buck gave a public lecture immediately following the ceremony.

—Leslie H. Lang

Anesthesiology Pain Management Center named one of '35 Top Pain Centers'

The Anesthesiology Pain Management Center at UNC Hospitals was named one of "35 Top Pain Centers" in the May issue of *Good Housekeeping*.

In addition, the magazine identified the physician in charge of the center, William S. Blau, MD, as an "exceptional practitioner."

UNC Hospitals' pain center is one of two in North Carolina, and the only one in the Triangle, that were included on the magazine's list.

Good Housekeeping created the list with the help of Castle Connolly Medical Ltd., the publisher of an annual guide called America's Top Doctors. According to the magazine, "A physician-led research team identified 35 cutting-edge pain centers all over the country, the types of pain that each center specializes in and an exceptional practitioner at each clinic."

In addition to his position as director of the pain center, Dr. Blau is an associate professor in the UNC School of Medicine. His special interests include management of chronic, cancer and acute pain.

Medical Illustration & Photography rolls out newest digital technology

With the introduction of two new cameras, the UNC School of Medicine recently acquired the latest in digital camera technology.

Medical Illustration & Photography, the school's photography and graphics department, purchased 12.1 megapixel digital cameras in the spring. The cameras capture images equivalent to 5 inch by 7 inch standard photographs or twice the normal resolution of digital cameras.

Clinical as well as basic science departments within the School of Medicine use Medical Illustration's photography services. The Department of Dermatology works closely with Medical Illustration, using photography to document patient cases. The Department of Surgery also frequently uses Medical Illustration, as does the Department of Pediatrics.

Photo by Rebekah Temple

Book drive a huge success for Children's Hospital

The N.C. Children's Hospital would like to thank everyone who helped make the "Have a Heart, Give a Book" campaign with book retailer Barnes & Noble and Raleigh TV station WRAL a success. Stores in the Raleigh-Durham area organized a children's book drive that resulted in more than 475 children's books donated to the Children's Hospital. The books' total retail value exceeded $4,000. Here, pediatrics patient Sakiah Hunt enjoys one of the books in a waiting area.

"With these cameras, we can make images much larger without the quality degrading. They are really an asset, because not we do not have to rely on computers to generate false pixels," said Doug Mokaren, director of the department.

Among the cameras' features are special lighting systems that do not cast shadows.

"These cameras have given us the capability to meet nearly any photography need required by our faced-paced medical setting," Mokaren said.

The two new cameras are additions to Medical Illustration's line of digital cameras. The department has been using digital cameras since the early 1990s.

To visit Medical Illustration on the Web, go to www.med.unc.edu/medill.

First Family Medicine Endowed Service Lecture takes a hard look at the state of medicine in U.S.

The American health care system is failing. We pay more than twice as much for health care per capita than any other industrialized nation, yet 19 countries have higher life expectancy rates and 23 have lower infant mortality rates. And although up to 77 percent of Americans say they would like to have a national health insurance program, a lack of will by politicians has stymied their wishes.

That was the message delivered April 14 by Wesley M. Wallace, MD, as he gave the first address in the new Department of Family Medicine Endowed Service Lectureship. The title of Dr. Wallace's speech was "The Physician Advocate: Beginning in Compassion and Ending in Politics."

Dr. Wallace, an associate professor in UNC's Department of Emergency Medicine, is a former national president of Physicians for Social Responsibility. The North Carolina Triangle chapter of PSR endowed the lectureship, which the Department of Family Medicine created because of a sense that the profession of medicine as it is currently practiced "had become unmoored" from its traditional commitment to service, said Warren Newton, MD, MPH, William B. Aycock distinguished professor and chair of Family Medicine.

The title of Dr. Wallace's address was inspired by the words of Rudolph Virchow, a 19th century pioneer in cellular pathology and social medicine, and South African theologian Peter Storey. Virchow argued that it wasn't enough for physicians to treat patients one at a time; they must also work to change social conditions that contribute to the spread of epidemics. Similarly, Storey contended that the work of a minister "begins in theology and ends in politics."

Dr. Wallace said that for physicians "who feel compelled to do something other than see one patient at a time … it begins in compassion, but I would submit to you that it has to end in politics." He then invited his audience to consider the politics of America's health insurance crisis and his proposed solution: a national health insurance plan.

Forty-five million people in the United States have no health insurance, Dr. Wallace noted. The number of uninsured Americans has grown steadily since the mid-1970s. During the 1990s, the number of uninsured continued to grow even as poverty rates fell.

At the same time, key indicators of the nation's health were declining. For example, at the end of World War II, the United States led the world in life expectancy. By 1960 we were 13th out of 29 industrialized countries. By 1997 we had slipped to 20th.

As these indicators were falling, the American health insurance system came to be dominated by health maintenance organizations. In theory, HMOs were supposed to contain health care costs by intelligently managing peoples' illnesses and reducing administrative costs. In practice, administrative costs have skyrocketed, Dr. Wallace said.

U.S. Bureau of Labor statistics show that the number of nurses in the United States increased by 149 percent between 1970 and 1988. During the same period, the number of health care administrators grew by 2,348 percent.

"That's really cutting the fat, isn't it?" Dr. Wallace asked ironically. "Let's explode the myth that HMOs are more efficient."

In contrast, Canada spends less than half as much per capita on health care than the United States, yet it scores better on several key health indicators. Infant mortality rates are 25 percent lower and life expectancy is two years longer. And everyone in Canada is covered by the country's national health insurance program — no one is uninsured.

"We spend twice as much as the next most expensive system. More than the Swedes, more than the Canadians, more than the Germans, more than the Dutch, more than the Japanese, more than twice as much as all of these nations, yet we have worse health care," Dr. Wallace said.

"If we have decided that we want to approach health care more than one patient at a time," Dr. Wallace said as he drew his remarks to a close, "we have to examine what is it in our system that keeps us from giving our patients the best health care, that keeps us from spending our time providing health care and requires that we spend our time wrestling with forms and bureaucrats."

Photo by Tom Hughes

Wesley M. Wallace, MD, presents the first Family Medicine Endowed Service Lecture on April 14. "Let's explore the myth that HMOs are more efficient," he said.

OUR HISTORY

a spectacular retrospective in photos

A new book takes a fond look back at the rich, 50-year history of the UNC School of Medicine's medical degree program and N.C. Memorial Hospital. This commemorative book is packed with rarely seen and never-before-published photographs. The cost of each book is $21.95, including shipping and handling. Proceeds will benefit programs at UNC Hospitals.

To order:

Fill out this coupon and mail it, along with a check for $21.95 made payable to The Medical Foundation of NC Inc., to Jubilee Book, UNC Hospitals, Public Affairs and Marketing, 101 Manning Drive, 6002 East Wing, Chapel Hill, NC 27514.

Order today!

Name_____

Street address_____

City_____ State_____ Zip code_____

Phone number_____ (daytime)_____ (evening)

Number of copies you would like to reserve at $21.95 each, including shipping/handling: ____

50s

Baxter Byerly, CMED '51, attended his 50th reunion at the Medical College of Virginia this spring. Dr. Byerly was the last transfer from the School of Medicine to the Medical College of Virginia.

Bob Cline, MD '57, was honored as the artist of the month by the Sanford Brush and Palette Club. Dr. Cline retired in 1997.

Eric Fearrington, MD '57, retired last year. Prior to his retirement, Dr. Fearrington served on the faculty of the Brody School of Medicine at East Carolina University for 12 years. Before joining the medical school, Dr. Fearrington worked in private practice.

A. Tyson Jennette, MD '59, retired from private practice in December after practicing orthopaedic surgery for 38 years in Wilson. Dr. Jennette now lives in Chapel Hill and is an assistant consulting professor of orthopaedics at Duke University teaching at the VA Medical Center.

60s

Charles O. Boyette, MD '61, received the 2002 Harris Memorial Award from the Medical Review of North Carolina Inc. for his contributions to health care quality and service to his community. Last year, he also was Staff Care's first runner up for the Country Doctor of the Year for the entire United States.

Wayne B. Vesters, MD '64, left his hometown of Jacksonville where he had practiced orthopaedic surgery for 29 years. Dr. Vesters now lives in Spokane, Wash., where he mostly performs hand surgeries.

70s

Stephen L. Green, MD '70, recently published a book entitled The Art of Medical Consulting: A Practical Guide.

Richard Fox, MD '75, recently spoke at the graduation of internal medicine and family practice residents at Moses Cone Hospital. Dr. Fox was selected by the residents to deliver the speech.

80s

Charles B. Nemeroff, MD '81, PhD '76, has been elected into membership in The Institute of Medicine. Last year, Dr. Nemeroff was awarded the Burlingame Prize from the Institute of Living. Dr. Nemeroff is chair of the Department of Psychiatry and Behavioral Sciences at Emory University School of Medicine.

Robert Dellinger, MD '82, recently published a historical novel entitled, "Mitchell's Peak," about early UNC faculty member Elisha Mitchell.

Bev Jones III, MD '82, has been appointed medical director of the Geriatric Behavioral Health Unit at Thomasville Medical Center, and will have a private practice with Physicians Eldercare, a group of long-term care geriatricians. He will remain on the clinical faculty at Bowman Gray School of Medicine.

Steven Citron, MD '84, has been named chief of interventional radiology at Piedmont Hospital in Atlanta, Ga. Prior to his appointment, Dr. Citron practiced nine years at Atlanta's Northside Hospital.

J. Franklin Hatchett Jr., MD '87, has been named chief of anesthesia services for the Moses Cone Health System in Greensboro.

90s

Humayum Zeya, MD '90, doubled boarded in internal medicine and emergency medicine. Dr. Zeya lives in McLean, Va., with his wife, Eileen, and sons, Liam and Conor.

00s

Shelley A. Houston, MD '01, received the Henry C. Fordham Award in May. The award is given to a UNC Hospitals house staff member by the graduating class in recognition of the qualities of patience, humility and devotion to medicine as were possessed by Dr. Fordham. Dr. Houston is a resident in the Department of Pediatrics.

Thomas L.P. Javelona, MD '01, was elected vice president of the UNC Hospitals House Staff Council and will serve on the Medical Staff Executive Council and the Clinical Management Committee for the 2003-2004 academic year. The House Staff Council represents and promotes the interests of those enrolled in programs of graduate medical education and works to improve the quality of patient care at UNC Hospitals.

House Staff

Hisashi Kajikuri, MD, HS '56-'60, was honored by congress in January for his contribution to medicine and 35-year service to Monterey Peninsula in California. Dr. Kajikuri also is the recipient of Monterey County's Physician of the Year award.

Boni E. Elewski, MD, HS '78-'82, took office in March as the president-elect for the American Academy of Dermatology. She will hold office for one year beginning in February 2004. Dr. Elewski is a professor of dermatology at the University of Alabama at Birmingham.

Amy J. Holland, MD, '91-'94, and her husband, Dana, celebrated the birth of their second son, Zachary Tyler, in September. Zachary joins Brad who is 10 years old. Dr. Holland is medical director of Christian Psychiatric Services, P.C. in Marietta, Ga.

Thomas L.P. Javelona, MD, rising 3rd-year clinical anesthesiology resident, has been elected as Vice President of the UNC Housestaff Council and will serve on the Medical Staff Executive Council and the Clinical Management Committee for the 2003-2004 academic year. The purpose of the Housestaff Council is to represent and promote the interests of those enrolled in programs of graduate medical education and to improve the quality of patient care for UNC Hospitals.

Deaths

Laura Ross-Venning, CMED '36, died in February. Dr. Ross-Venning lived in Chapel Hill, and her specialty was pediatrics.

Robert Wilson Jr., CMED '36, died in August 2001. Dr. Wilson lived in Villanova, Pa., and his specialty was obstetrics and gynecology.

Joseph W. Kahn, CMED '40, died in January. Dr. Kahn lived in Intervale, N.H., and his specialty was general medicine.

C. Lowry Pressly, CMED '41, died in September. Dr. Pressly lived in Charlotte, and his specialty was general surgery.

Edward H. Alderman, CMED '44, died in February. Dr. Alderman lived in Four Oaks, and his specialty was family medicine.

Clifton L. Quinn, MD '54, died in February. Dr. Quinn lived in Atlantic Beach, and his specialty was psychiatry.

Ezra D. Griffin Jr., MD '73, died in April. Dr. Griffin lived in Charlotte, and his specialty was obstetrics and gynecology.

Thomas J. Seely, MD '81, died in May. Dr. Seely lived Summerfield, and his specialty was psychiatry.

Eric S. Bachman, MD '95, died in April. Dr. Bachman lived in Salt Lake City, Utah, where he was a radiology fellow at the University of Utah.

Gene therapy pioneered at UNC is given to children with rare disorder

A form of gene therapy created and produced at UNC and approved by the U.S. Food and Drug Administration has been given to children with a rare, inherited neurological disorder.

This work involved collaboration with investigators at the Robert Wood Johnson Medical School, of the University of Medicine and Dentistry of New Jersey, and was led by Dr. Paola Leone and a group of 16 investigators and surgeons.

SAMULSKI

The children have Canavan disease, characterized by spongy degeneration of the brain's white matter. The disease affects the growth of the fatty myelin sheath insulating nerve fibers.

Canavan disease symptoms appear in early infancy and progress rapidly. These may include mental retardation, loss of previously acquired motor skills, feeding difficulties, abnormal muscle tone (floppiness or stiffness), poor head control and megalocephaly (abnormally enlarged head). Paralysis, blindness or hearing loss also may occur.

There is no cure for Canavan disease or a standard course of treatment other than symptomatic and supportive. Prognosis is poor; victims usually die before age 10.

"Children with Canavan disease have a mutation in one of their genes, causing a deficiency of an enzyme responsible for removing cellular waste," said Dr. R. Jude Samulski, professor of pharmacology at UNC's School of Medicine and director of the Gene Therapy Center. "In this disease, waste product builds up, causing brain cells to die."

Absolutely nothing can be done to prevent disease progression, said Samulski, which is why the objective was to place a gene into the brain that would express the missing enzyme.

The therapy received by the children uses a genetically altered adeno-associated virus, or AAV, to deliver genes into the body. Samulski, a pioneer in AAV research, said he chose to study and develop altered AAV for several reasons, including its potential for fewer toxic effects than that of many other viruses studied for use in gene therapy.

Moreover, a gene delivered via AAV remains active in cells for months or even years.

This is the first time the FDA has approved the clinical use of an AAV vector product for gene therapy produced by a U.S. academic institution.

The children who received the gene therapy are between ages 4 and 6, and the procedure was conducted recently at the Robert Wood Johnson Medical School. Surgeons drilled a series of six holes in the skull through which the virus and its gene payload were infused directly into various brain sites.

Recovery from the surgery is rapid and does not require lengthy hospitalization, Samulski said. The children return home within a few days.

When infused into the brain, AAV begins to "infect" neuronal cells via molecular doorways on the surface. "The AAV vector then begins delivering the gene, and that genetic information gets 'read' as part of the normal genes in the cell," Samulski said.

"We're essentially replacing the function of the mutated gene. That gene is still at its original chromosome location in the nucleus. What we're introducing is not in the chromosome but attached to the nucleus of the cell. So we're delivering extra-chromosomal DNA that has all the 'start' and 'stop' signatures and other information the cell needs to make the appropriate protein; in this case, the missing enzyme."

While a cure is highly unlikely, researchers

hope disease progression can be slowed, if not halted. Two weeks following surgery, the children are given a battery of tests, including nuclear magnetic resonance imaging, or NMR. The first NMR study will mainly look for safety endpoints, including tissue damage after surgery.

"At three months onward NMR imaging and NMR spectroscopy studies will provide information regarding elevated levels of an enzyme substrate associated with cellular waste product and brain myelination patterns," Samulski said. "Decline of the substrate indicates that the virus is working and the gene is expressing and starting to break down the waste product," Samulski said.

More subjective signs of progress over time include weight gain. In addition, on a cognitive level, parents may notice an increased ability to respond to demands.

"In this clinical trial, for these children, we're hoping to halt further deterioration. It's not likely we can regenerate new brain tissue," Samulski said. He added that any indication of progress would provide increased impetus to treating normal infants shown by screening tests to likely develop the disease.

Molecular studies in Samulski's laboratory using animal models are aimed at improving vector systems for delivering gene therapy. One goal is to achieve global distribution of the virus to brain tissue.

"We're optimistic that our next generation of vectors will safely bring to patients something well beyond marginal improvement," he said. "One can't underestimate the importance of understanding the basic science first before moving into the clinical setting."

Key to gene therapy vector research at UNC is the Human Applications Laboratory, or HAL. Located in the General Clinical Research Center at UNC Hospitals, this 1,400-square-foot facility was designed for production of various biological reagents, including viral vectors, that may be required for phase I (safety and efficacy) clinical trials.

The facility meets FDA requirements for germ-free processing. Viral vectors and their components are generated at high purity and concentration levels.

—Leslie H. Lang

Researchers make a link between protein, brain cell scarring

A new study links a protein discovered a few years ago at the University of North Carolina at Chapel Hill with formation of scar tissue that occurs after injury to nerve cells in the brain or spinal cord.

Such scarring apparently blocks neurons of the central nervous system from recovering after traumatic injury — inhibiting their axon filaments from regenerating and ferrying nerve impulses elsewhere, to other neurons and tissue, including muscle. Loss of nerve cell function and paralysis can result.

The findings, published online this week in the journal Molecular and Cellular Neuroscience, add new knowledge to a long-standing issue in neuroscience: why do nerve cells in the peripheral nervous system grow back after an injury such as a skin cut, but cells in the brain or spinal cord do not.

"One school of thought has it that there's something fundamentally different in the neurons of the central nervous system versus the peripheral nervous system. This is likely not to be a major factor," said Dr. Carol A. Otey, assistant professor of cell and molecular physiology at UNC School of Medicine and the study's senior author. "The second school of thought is that there are chemical changes that occur in an area of injury that are specific to the brain and spinal cord, changes that repel injured neurons from being able to re-extend their axons. And this is now known to be true."

Added Otey: "Also thought to be true is that a physical barrier forms to prevent axon regeneration. And that's what we're most interested in, this barrier that's called the glial scar." When neurons are cut, star-shaped glial cells called astrocytes migrate to the area and weave together to form a glial scar. (Glia are cells that help provide support for neuronal functioning.)

"If the neuron has survived and tries to re-extend its axon, it can't go through this barrier," Otey said. "The question is, what occurs at the molecular level that's allowing these astrocytes to behave this way, to move towards the lesion, to change their shape and form a barrier?"

Enter palladin, the protein Otey and her colleagues identified at UNC in 2000.

Named after the 16th century architect, Andrea Palladio, the protein appears to be involved in the architecture of cells, playing a key role in determining cell shape and allowing cells to move.

"We had seen palladin expression correlate with motility in other cell types. So we began by asking if palladin is found in adult mature astrocytes. And it isn't," said Otey.

But, in the new research, Otey, along with lead author and instructor in cell and molecular physiology Dr. Malika Boukhelifa and others, found that palladin levels increase, are "upregulated," following traumatic injury to the central nervous system.

"We asked this first in tissue culture model, where we had a monolayer of cultured astrocytes. And we could just very easily scrape the monolayer to mimic injury, fix the cells at different time points and check for protein expression," Otey said. Fluorescence microscopy was used to visualize the expression of the protein.

"Palladin gets upregulated rapidly," she said. "You specifically can see it at the tips of the processes pointing into the wound. Using staining techniques, you can see this upregulation at three hours after injury. By six hours after injury, the processes have flattened out and are trying to fill the wound and the whole area now is positive for palladin."

In collaboration with the laboratory of neuroscientist Dr. Juli Valtschanoff, assistant professor of cell and developmental biology, the researchers extended their tissue culture palladin investigations to an animal model, the adult rat. A tiny lesion was made in the animals' brain with a glass needle and time points after injury were recorded.

The researchers then used fluorescence immunostaining and microscopy to examine the lesion area for palladin expression.

"Just a few hours after a lesion there are these brightly palladin-positive astrocytes close to the lesion, with more appearing at later times," Otey said. "And this is quite persistent. At seven days after injury, there's this beautiful zone of high levels of palladin expression right around the injury."

Thus, according to Otey, the above findings show rapid and persistent palladin expression in cells close to a lesion, in cells that are known to change their shape and to move.

"Now it became important to ask if palladin expression is what causes cells to change their shape?"

This was addressed in tissue culture experiments. Using gene transfer methods, astrocytes were "transfected" either with palladin and green fluorescent protein (GFP) or with GFP alone. Cells treated with palladin and GFP lost their stellate, or star-like, shape and became polygonal, thickened and flattened. Cells transfected with GFP alone did not. In addition, palladin-transfected cells also displayed signs of structural changes previously associated with injury and shape change. "So it would appear that palladin is controlling astrocyte cell shape," Otey said.

Might the findings suggest a possible novel therapeutic avenue for central nervous system cell regeneration after injury – whether it be stroke, traumatic injury or repeated epilepsy seizures?

"If palladin upregulation is allowing the astrocytes to form the glial scar, then one approach to enhancing recovery to injured CNS nerves might be to prevent that upregulation," Otey said.

Still, the researcher and her co-authors caution that more work is needed. Experiments now underway are aimed at designing a "knock-out" animal model in which astrocytes cannot express the protein after injury. The researchers will then be able to determine if glial scar formation is attenuated and if doing so will enhance injury recovery.

"It's likely that in the end we'll find out it's more complicated than it is in cell culture," Otey said. "We may learn that the glial scar may be necessary, as it's unlikely that this structure had evolved simply to cause paralysis.

"It may be necessary to allow the glial scar to form up to a point, then attenuate formation of the scar. It probably serves some function to isolate the area of injury, maybe to prevent an inflammation response. We don't know. It will be interesting to see, first of all, if it's sufficient to allow regrowth of axons by preventing the glial scar, or will doing so generate

other problems we haven't anticipated? Indeed, it will be interesting to do these experiments.

OTEY

Along with Otey, Boukhelifa and Valtschanoff, other co-authors were a visiting scientist from South Korea, Dr. Se-Jin Hwang, Dr. Aldo Rustioni of cell and developmental biology, and Dr. Rick B. Meeker of neurology. The study researchers are members of the UNC Neuroscience Center.

Support for the research came from the National Institute of Neurological Disorders and Stroke, a component of the National Institutes of Health.

— Leslie H. Lang

Hormone therapy helps prevent recurrent premature birth

Injections of a progesterone hormone drug given to pregnant women whose previous babies had been born prematurely can help prevent another pre-term birth, new research shows.

Researchers from the University of North Carolina at Chapel Hill participated in a multi-center study of the drug 17-alpha-hydroxyprogesterone caproate, also known as 17P. Small studies from the 1970s and 1980s suggested that the therapy might prevent recurrent pre-term births, but this is the first large-scale rigorous trial to confirm that it could, according to Dr. John M. Thorp Jr., McAllister distinguished professor of obstetrics and gynecology at UNC's School of Medicine and principal investigator at the UNC study site.

"I believe this is the first primary prevention tool to actually prevent pre-term delivery that's ever been rigorously proven to work," he said.

The new findings were presented at the 23rd Annual Meeting of the Society for Maternal-Fetal Medicine in San Francisco.

Participants in the study included more than 450 pregnant women with a well-documented history of spontaneously giving birth prior to 37 weeks. Of these women, whose pregnancies were 16-to-20 weeks along, 306 were randomly assigned to treatment with weekly injections of 17P, while 153 received placebo injections and served as a control group. Injections continued until 36 weeks gestation. The study was double-blinded; neither researchers nor participants knew to which of the groups participants had been assigned.

Treatment with 17P significantly reduced the risk of pre-term birth at less than 37, 35 and 32 weeks gestation. The race of participants was not a factor in treatment success.

The risk of pre-term term birth prior to 37 weeks was reduced by 34 percent and the risk for delivery at less than 32 weeks was reduced by 42 percent.

"In fact, the study was stopped by such a dramatic and positive effect of treatment," Thorp said.

Babies who are born at less than 32 weeks are most at risk, in terms of health problems and mortality. That's why the study indicates that therapy with 17P would have a great impact on nursery statistics, particularly neonatal intensive care units, said Dr. Kenneth J. Moise Jr., professor of obstetrics and gynecology and division chief of maternal and fetal medicine at UNC.

"Do you save days in the nursery? Do you save bad outcomes? This is the first study to have done that," he said.

The progesterone drug is not new. It is approved by the U.S. Food and Drug Administration and saw extensive use in the 1950s and 1960s as a synthetic progestin.

The study involved 19 members of the Maternal Fetal Medicine Units Network of the National Institute of Child Health and Human Disease at the National Institutes of Health.

The UNC trial was a collaborative effort of the departments of obstetrics and gynecology, and pediatrics; the UNC Center for Maternal and Infant Health; and the Cecil G. Sheps Center for Health Services Research.

UNC will be involved in another clinical trial also planned for women at risk for pre-term birth, Thorp said. In this study, all women will be treated with 17P and randomized to receive either an omega-3 fatty acid or placebo pill. Studies have linked omega-3 fatty acids (associated with cold-water fish and some other food sources) with increased gestational length.

— Leslie H. Lang

development

In memory of Samantha: A $2.5 million gift for the study of SIDS

By Chrys Bullard
Office of University Development

Will and Donna Biles of Blowing Rock celebrated what would have been their daughter's sixth birthday by making a gift to parents across the nation. They are making a $2.5 million donation to the UNC Department of Pediatrics for the study of sudden infant death syndrome (SIDS). The gift was made on the Biles' behalf by an anonymous trust in memory of their daughter, Samantha Ann Biles, a 1997 victim of SIDS.

"We have dreamed of doing something to help find out what causes SIDS ever since our daughter died," said Will Biles. "We were thrilled to learn about the research being done at UNC-Chapel Hill. It also pleased us that the research was taking place in conjunction with the opening of the new North Carolina Children's Hospital, the only hospital in the state that treats children regardless of their ability to pay."

SIDS is the sudden death of an apparently healthy infant whose death remains unexplained after a postmortem investigation. It is the leading cause of death in infants between 1 month and 1 year of age. Samantha Biles was four months old when she died.

"SIDS has been associated with problems of the heart, lungs, infections, sleeping positions and abnormalities but the underlying cause is not known," said Dr. Alan Stiles, chair of the department of pediatrics. This gift is exciting for the faculty because it will help establish a new research group that builds on our strengths in cardiac, pulmonary and brain development research. This work could eventually lead to prevention of these tragic losses for families."

Income from $1.5 million of the endowment will create the Samantha Ann Biles Distinguished Professorship, used to attract or retain a SIDS physician-scholar in the department of pediatrics. The university will apply for $334,000 in state matching funds from the Distinguished Professors Endowment Trust Fund to supplement the professorship. Income from the endowment's remaining $1 million will create the Samantha Ann Biles Fund for SIDS Research to support the work of faculty and to bring visiting SIDS scholars to campus.

"Research made possible by this generous gift has the potential to directly impact children and families in North Carolina and across the nation," said Jeffrey L. Houpt, MD, dean of the School of Medicine. "It establishes a new area of research that draws on the strengths of scientists and clinicians already at work at one of the nation's leading schools for health related research."

Biles' gift counts toward the university's Carolina First campaign goal of $1.8 billion. Carolina First is a comprehensive, multi-year private fund-raising campaign to support UNC's vision of becoming the nation's leading public university.

Photos by Brian Strickland

Alan Stiles, MD '78, chair of the Department of Pediatrics, greets Will and Donna Biles in the play atrium of the new N.C. Children's Hospital.

Loyalty Fund Leadership 2002-2003

Thank you to the over 300 alumni volunteers who have served on steering committees for the 19 class reunions and area campaigns conducted in fiscal year 2002-03 (July 1–June 30). These volunteers contacted over 1,800 alumni and made 2002-03 a success.

Area Campaigns

Atlanta

Louisa E. Chapman, M.D. '82
Co-Chair
Saundra A. Maass-Robinson, M.D. '81 Co-Chair

Buncombe County

Susan R. Mims, M.D., M.P.H. '93
Co-Chair
Ellison L. Smith, Jr.. M.D. '93
Co-Chair

Durham/Orange Counties

Robert A. Bashford, M.D. '71
Co-Chair
G. Patrick Guiteras, M.D. '69
Co-Chair
James E. Manning, M.D. '85
Co-Chair
Edward A. Norfleet, M.D. '70
Co-Chair

Forsyth County

John D. Phipps, M.D. '93
Co-Chair
Harold C. Pollard III, M.D. '74
Co-Chair

Guilford County

Paul D. Barry, M.D. '76
Co-Chair
Otis N. Fisher, Jr., M.D. '59
Co-Chair

Mecklenburg County

John E. Barkley, M.D. '90
Co-Chair
R. Dean Butler, M.D. '86
Co-Chair
Barry R. Schneider, M.D. '80
Co-Chair

New Hanover County

Gregory L. Drake, M.D. '78
Co-Chair
James R. Harper, Jr., M.D. '84
Co-Chair
Edward W. Whitesides, M.D. '88
Co-Chair

Wake County

Holly J. Burge, M.D. HS
Co-Chair
Robert E. Littleton, M.D. '81
Co-Chair
Sheppard A. McKenzie III, M.D. '74 Co-Chair
Joel E. Schneider, M.D. '85
Co-Chair

Reunion Campaigns

Class of 1943

Frank R. Reynolds, M.D. '43
Chair
William N. Hubbard, Jr., M.D. '43
Kenan B. Williams, M.D. '43

Class of 1958

J. Richard Patterson, M.D. '58
Co-Chair
Paul M. Weeks, M.D. '58
Co-Chair
Clarence A. Bailey, Jr., M.D. '58
M. Paul Capp, M.D. '58
Thomas Craven, Jr., M.D. '58
Carl A. Furr, Jr., M.D. '58
George W. Hamby, M.D. '58
Dan E. Johnson, M.D. '58
T. Lane Ormand, M.D. '58

Class of 1963

I. Kelman Cohen, M.D. '63
Co-Chair
Charles J. Sawyer III, M.D. '63
Co-Chair
Neil C. Bender, M.D. '63
Karl F. Bitter, M.D. '63
Charles L. Cooke, M.D. '63
John W. Dalton, Jr., M.D. '63
William B. Deal, M.D. '63
Clarence A. Dunn, Jr., M.D. '63
J. Michael Gallagher, M.D. '63
Ira M. Hardy II, M.D. '63
Charles I. Loftin III, M.D. '63
James G. White, M.D. '63

Class of 1968

Joseph P. Archie, Jr., M.D. '68
Co-Chair
David M. Rubin, M.D. '68
Co-Chair
George W. Bensch, M.D. '68
Lucius Blanchard, Jr., M.D. '68
Alan Davidson III, M.D. '68
James C. Little, Jr., M.D. '68
David J. Reese II, M.D. '68
E. Franklin Shavender, M.D. '68
Robert B. Shearin, M.D. '68
F. Charles Tucker, Jr., M.D. '68
Robert C. Vanderberry, Jr., M.D. '68
J. Allen Whitaker III, M.D. '68
Walter C. Whitehurst, Jr., M.D. '68
Morris E. Williams, Jr., M.D. '68

Class of 1973

Robert R. Walther, M.D. '73
Co-Chair
Stephen B. Billick, M.D. '73
Franklin S. C. Clark III, M.D. '73
William B. R. Fahmer, M.D. '73
Terry L. Fry, M.D. '73
Donald B. Goodman, Jr., M.D. '73
C. Stewart Rogers, M.D. '73

Class of 1978

Paul W. F. Coughlin, M.D. '78
Co-Chair
Richard C. Worf, M.D. '78
Co-Chair
John D. Benson, M.D. '78
Betty J. Crosby, M.D. '78
George S. Edwards, Jr., M.D. '78
H. Craig Price, M.D. '78
Alan D. Stiles, M.D. '78
Nancy L. Teaff, M.D. '78
Barry H. Teasley, M.D. '78
John C. Trotter, M.D. '78
Gregory H. Tuttle, M.D. '78
William A. Walker, M.D. '78
J. Byron Walthall, Jr., M.D. '78

Class of 1983

Thomas W. Benton, M.D. '83
Co-Chair
John M. Herion, M.D. '83
Co-Chair
Paula F. Miller, M.D. '83
Co-Chair
Paul L. Molina, M.D. '83
Co-Chair
James A. Bryan III, M.D. '83
Ronald W. Cottle, M.D. '83
Mary Anne Dooley, M.D. '83
Robert L. Green, Jr., M.D. '83
Woodrow W. Reeves, Jr., M.D. '83
Lisa L. Shockley, M.D. '83
C. Stephen Stinson, M.D. '83
Deborah L. Tussing, M.D. '83

Class of 1988

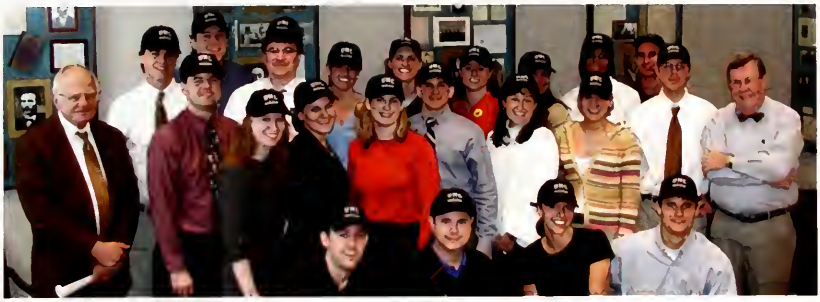
Jon P. Brisley, M.D. '88
Co-Chair
Allison L. Jacokes, M.D. '88
Co-Chair
Stuart J. Levin, M.D. '88
Co-Chair
John E. R. Perry III, M.D. '88
Co-Chair
J. Blair Butler, M.D. '88
J. Craig Charles, M.D. '88
Debra L. Coles, M.D. '88
Sara H. Collins, M.D. '88
Peter G. Dalldorf, M.D. '88
C. Gaelyn Garrett, M.D. '88
Cynthia M. Gregg, M.D. '88
Ritsu Kuno, M.D. '88
Rayman W. Lee, M.D. '88
Philip J. Nahser, Jr., M.D. '88
Andrew S. Neish, M.D. '88
Charles E. Parke, M.D. '88
Jacquelyn L. Redd, M.D. '88
H. Kyle Rhodes, M.D. '88
Jettrey E. Roller, M.D. '88
Deepak Sawhney, M.D. '88
Charles D. Scheil, M.D. '88
Mark C. Sturdivant, M.D. '88
John D. Symanski, M.D. '88
Spyro P. Vulgaropulos, M.D. '88
Stanley R. Watson, M.D. '88
Edward W. Whitesides, M.D. '88

Class of 1993

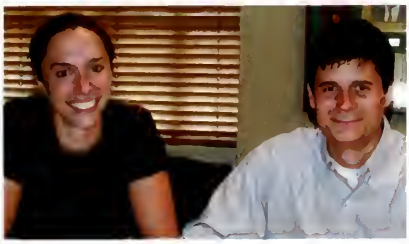
Carolyn J. Dalldorf, M.D. '93
Co-Chair
David T. May, M.D. '93 Co-Chair
Lisa L. May, M.D. '93 Co-Chair
Rebecca B. Tobin, M.D. '93
Co-Chair
Ahmad J. Ali, M.D. '93
Lesley B. Browder, M.D. '93
John S. Chase, M.D. '93
John D. Corey, M.D. '93
Karla L. DeBeck, M.D. '93
C. Anthony Kim, M.D. '93
John D. Phipps, M.D. '93
John B. Piecyk, M.D. '93
Carolyn T. Spencer, M.D. '93
Holly A. Stevens, M.D. '93
David A. Wells, M.D. '93
Eric A. Whitsel, M.D. '93
Kirk L. Woosley, M.D. '93

Class of 2003

Anna C. Frick '03 Co-Chair
Allen F. Marshall '03 Co-Chair
Aarti Agarwal '03
Diana D. Borton '03
Theodore E. Brisson '03
Ian B. Buchanan '03
Tara T. Byer '03
Jamila F. Chance '03
Kimberly D. Clay '03
Amarinthia E. Curtis '03
Elizabeth B. Davis '03
Jamie N. Deis '03
Jennifer Lipkowitz Eaton '03
Stephanie E. Falk '03
Claire E. Farel '03
Nicholas J. Fitzsimons '03
Allison C. Herbert '03
Lacy C. Hobgood '03
Alison S. Kavanaugh '03
Joshua W. Knowles, Ph.D. '03
Peter G. Kranz '03
Aisha T. Liferidge '03
Patrick E. Link '03
Lindsee E. McPhail '03
J. Bryan Mitchell '03
John W. Morehouse '03
Leilani S. Mullis '03
Beverly J. Newhouse '03
James M. Pearson, Jr. '03
Erika A. Petersen '03
Dionne M. Piggott '03
Read Pukkila-Worley '03
Jeremiah S. Redstone '03
Michael J. Reilly '03
Mitchell B. Sally '03
Rishi Syal '03
Brian S. Uthlaut '03
Rhonda Y. Vestal '03
Sheneika M. Walker '03
Eric T. Warren '03
Benjamin L. Wilson '03
Carrie E. York '03



Fourth-year Loyalty Fund Campaign Steering Committee for Class of 2003.



Class of 2003 Loyalty Fund Co-Chairs Anna Frick and Alan Marshall.

development

Loyalty Fund a success
Anna Frik and Alan Marshall, center, co-chairs of the Fourth Year Loyalty Fund Campaign present a check representing 92 percent class participation.

Co-Founders meet
Hazel and Ernie Craige, MD, former chief of cardiology, left, joined Christopher Fordham, MD, above at the annual Co-Founders reception in April.

Dr. Houpt meets Wilmington area alumni
Dean Jeffrey Houpt held a reception for alumni of New Hanover County in May.

John M. Herion, MD '83, right, with James Harper, MD

Marguerite Reynolds, right, wife of Frank R. Reynolds, MD '43, speaks with Jane McNeer, assistant dean for Institutional Development and vice president of The Medical Foundation of North Carolina, Inc.

from the president

Dear Alumni:

I recently had the privilege, as president of the Medical Alumni Association, to represent you at the School of Medicine's 2003 commencement ceremonies. Despite the cold and rainy weather outside, we each felt the warmth of the "sun" shining inside the Dean Smith Center. In my role, I presented to each of the 134 graduates a certificate of lifetime membership in our association.

As I marched in the opening procession, I reflected over how much has changed and yet stayed the same since I received my degree 48 years earlier. Advances in diagnostic and therapeutic modalities have helped in our efforts to care for our patients and extend individual life expectancy, but the leading causes of death remain heart attack, stroke and cancer.

Today laptops, palm pilots and cell phones are considered by many to be required equipment for keeping pace with health care. In the 1950s, the air encephalogram and contrast X-ray studies were standard diagnostic modalities. Today, we are fortunate to utilize technologies such as the CAT scan, MRI and PET scans to make diagnoses much more accurate and humane. I can only imagine what technologies will be utilized by these new physicians years from now.

There were several poignant moments during the ceremonies that reminded all of us in attendance how precious our time on earth is and that we should make the most of it. The first came when the mother of Brett Pearce, MD, a senior with cystic fibrosis who died shortly before graduation, was presented with her son's diploma. I can only imagine the sense of pride and loss felt by the Pearce family. While he was unable to share in this cherished ceremony, Brett's family will forever take comfort in knowing that he endured and overcame tremendous obstacles to earn his degree.

I also was struck by the speech given by senior class co-president Kelly Fogleman. Holding a rose as she spoke, she advised her classmates to take time to smell the roses as they progress in their careers. It reminded me of the responses given to a question posed to my graduating class at its 40th reunion. When asked, "What would you do differently with your life in medicine if you could do it over?" over 65 percent of those responding said they would have made more time for their families and themselves. It is my hope that these graduates heed these early words of advice provided by their colleague.

It truly was a memorable day inside the Smith Center as another class of new physicians strode forward into an ever-changing world – and this long-time physician was honored to share in their moment in the sun.

Sincerely,

John W. Foust, MD '55

UNC Medical Alumni Affairs – **www.med.unc.edu/alumni/HomeFrame.htm**
The Medical Foundation of North Carolina Inc. – **www.medicalfoundationofnc.org.**
UNC Health Care – **www.unchealthcare.org**

CME/Alumni Calendar

Sept. 5-6 – Chapel Hill
N.C. Cardiovascular Meeting

Sept. 18-20 – Chapel Hill
Clotting Factor Inhibitors — New, Basic and Clinical Aspects
20th Anniversary Symposium

Oct. 4 - Chapel Hill
Fall Co-Founders Meeting

Oct. 11 - Chapel Hill
Family Day and White Coat Ceremony

Oct. 11-12 – Chapel Hill
Breast Imaging and Digital Mammography Conference

Oct. 17-18 – Chapel Hill
Fall Alumni Weekend

Nov. 21 – Chapel Hill
Psychiatry Across the Ages

Nov. 22-23 – Chapel Hill
Ham Symposium

Feb. 13-14 – Chapel Hill
Multidisciplinary Advances in the Treatment of Prostate Cancer

March 31-April 2 – Chapel Hill
28th Annual Internal Medicine Conference

April 16-18 – Chapel Hill
Spring Alumni Weekend

For more information, go to **www.med.unc.edu/alumni and www.med.unc.edu/cme.**

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of $_____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Airport Road, Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or jmcneer@email.unc.edu.

Nonprofit Organization
U.S. Postage
PAID
Chapel Hill, NC
Permit No. 24

PERIODICALS
HEALTH SCIENCES LIBRARY
CB 7585
CAROLINA CAMPUS 7585

Fall 2003

UNC Medical Bulletin

THE EDUCATION ISSUE

A publication for alumni and friends of
the University of North Carolina at Chapel Hill School of Medicine and UNC Health Care

UNIVERSITY OF NORTH CAROLINA
OCT 3 1 2003
HEALTH SCIENCES LIBRARY

Triple Vacancy

Dean. CEO. Vice Chancellor. As **JEFF HOUPT** prepares to step down from all three positions, what did he accomplish? And how will his **SUCCESSOR** be chosen?

from the dean

Dear Alumni and Friends:

When I came to UNC as dean in 1997, the School of Medicine had just been re-accredited for seven years by the Liaison Committee on Medical Education (LCME). We welcome this peer review process to show our enrolled students and the general public that we are in compliance with nationally accepted standards of educational quality. In January we are due again for an LCME site visit, so it is timely to devote several articles in this issue of the Bulletin to highlighting the accomplishments of our medical education program.

I have asked Cheryl McCartney, MD, executive associate dean for Medical Education and chair of our Institutional Self-Study Task Force, to choose the topics and to share with you below some findings of our past year's comprehensive look at ourselves.

JLH

"Impressive!" has been my recurring thought as I have been reading the hundreds of pages of description of the dimensions of our School of Medicine, written by faculty, administrators, staff and students in response to the LCME's Self-Study questions about our compliance with 119 accreditation standards.

At UNC, our students are learning medicine from faculty experts in their fields who are leading the country in research to advance medical knowledge. Beyond expertise, our teachers model collegiality, teamwork and high expectations for continuous self-improvement. We have a talented and diverse student body whose culture encourages collaboration and mutual respect. The majority of our students participate in extracurricular activities that involve them in community service and more than two-thirds do research with a faculty mentor. National presentations and leadership positions are often the result of their efforts. Thanks to generous state support, tuition is among the lowest in the country, leaving students with much less debt than graduates of comparable schools. Our AHEC Program, new buildings, world-class Health Sciences Library and innovative educational technology all contribute to an effective, efficient and enjoyable learning environment. Competitive residency programs in all specialties seek our graduates, not only because of their knowledge, but also because of their patient-centered care. To the students' survey for LCME of all four enrolled classes, 87 percent responded. More than 90 percent of those said that they were "satisfied" or "very satisfied" with the quality of their medical education!

Rapid increases in medical knowledge, new illnesses and threats to our patients' health and new developments in educational teaching and assessment methods demand that the curriculum management system be nimble in order to respond promptly to the need for change. Since the last LCME visit, we have considerably improved our curriculum governance and the changes have supported the development of the new Second Year Curriculum described in this issue of the Bulletin. We prize constructive feedback throughout the system of curricular committees. Central to our new system is student participation. The Whitehead Society Vice Presidents for Curriculum Affairs and their representatives in each class regularly attend faculty course director meetings both to bring reports to classmates and to tell us "what the students think." For the past two years, we have benefited from an innovative, student-initiated program of focus groups whose students maintain an ongoing conversation with the course director on behalf of their classmates that has led to clarifications, incremental course improvements and greatly increased satisfaction for all.

We are grateful to Dean Jeffrey Houpt for his ongoing support and insightful guidance of our educational mission. We wish him all the best for his future endeavors.

contents

COVER STORY
Dean Houpt: In his own words 2

FEATURES
In many ways we are not that different 12
Our new way 16
The means to an end 18
The better of Netter 21
Giving back 22
UNC center makes life easier 26
Getting to the heart of things 28
UNC meets SARS 32

DEPARTMENTS
From the Dean . . . . . Inside Front Cover
Special Events 10
Faculty 36
News 38
Alumni 43
Research 44
Development 48
From the President . . . . . Inside Back Cover
CME/Alumni Calendar . . . . . Back Cover

page 2

on the cover

Jeffrey L. Houpt, MD, is the dean of the School of Medicine, CEO of the UNC Health Care System and vice chancellor for Health Affairs. Next spring, he will step down from all three roles – and a search is already underway to find his successor. In a farewell interview, Dr. Houpt looks back at all the changes that occurred during his tenure and what his future holds. And we unveil who will find the person to fill his shoes.

Cover montage and photography by Brian Strickland

The UNC Medical Bulletin is published four times annually by the UNC-Chapel Hill Medical Alumni Association, Chapel Hill, NC 27514. Postage is paid by the nonprofit association through U.S. Postal Permit No. 24. Address correspondence to the editor, Office of Public Affairs & Marketing, School of Medicine, CB#7600, University of North Carolina, Chapel Hill, NC 27514.

Medical Alumni Association Officers

President
John W. Foust, MD '55
Charlotte

President Elect
George W. Cox, MD '66
Atlanta, Ga.

Vice-President
William M. Herndon Jr., MD '81
Charlotte

Secretary/Treasurer
Theodore C. Kerner, MD '85
Lewisville

Editorial Staff

Karen McCall
Vice Pres. Public Affairs & Marketing

Lynn Wooten
Editor

Dick Broom, Bernadette Gillis, Tom Hughes, Leslie H. Lang, Tom Maltais, Mary Ollila, Rebekah Temple and Eleanor Lee Yates
Contributing Writers

Tom Hughes, Jay Mangum, Brian Strickland and Rebekah Temple
Photographers

In his **own words**

By Dick Broom

The six years that Jeffrey Houpt, MD, has served as dean of the School of Medicine have been a time of remarkable growth and change. Advancements have occurred in clinical and research programs, research funding, physical facilities and the school's national stature. The school also has become stronger in almost every area of endeavor.

Dr. Houpt announced in May that he will step down by next May from his three UNC jobs — dean of the medical school, vice chancellor for Medical Affairs and chief executive officer of the UNC Health Care System.

But he will leave a lasting imprint.

Dr. Houpt has changed the face of the School of Medicine, appointing 23 new department chairs and center directors. He oversaw the creation of the Department of Genetics and the Carolina Center for Genome Sciences, which is bringing together faculty from the entire university. Medical school funding from the National Institutes of Health has more than doubled during his tenure, exceeding $190 million this fiscal year, and medical students' MCAT scores have risen.

The physical landscape also has changed dramatically. New facilities completed and dedicated on Dr. Houpt's watch include the Neuroscience Research Building, the Bioinformatics Building, the Biomolecular Research Building and, at UNC Hospitals, the North Carolina Women's and Children's Hospitals.

Dr. Houpt has initiated planning for additional growth and revitalization of the physical plant. Since the state's voters approved a bond issue for higher education in November 2000, plans have been developed for renovating 1 million square feet of existing medical school space. Construction has begun on 600,000 square feet of research space and 100,000 square feet of office space. Among the new facilities being planned is a $77 million genetic medicine building that will open in 2006. Three aging campus landmarks — Berryhill Hall, Burnett-Womack and the Medical Sciences Research Wing of MacNider – will be totally renovated within the next four years.

As vice chancellor for medical affairs, Dr. Houpt has represented the interests of the medical school in South Building and, often, in Raleigh. As the first CEO of the UNC Health Care System, he effected the successful partnering of UNC Hospitals, UNC Physicians & Associates and, since 2000, Rex Healthcare in Raleigh.

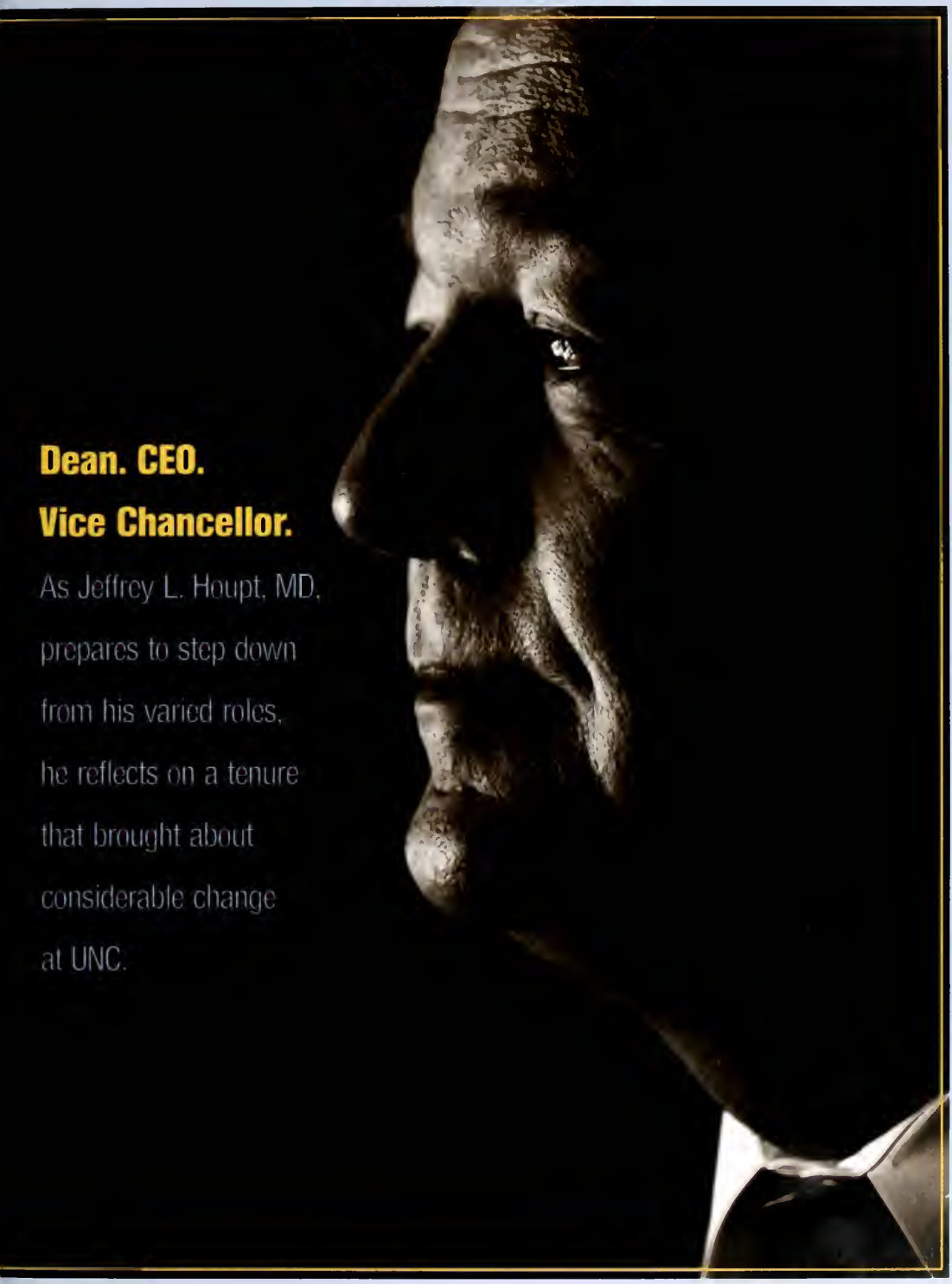
Dr. Houpt recently talked about his tenure as medical dean, vice chancellor and CEO.

"He has positioned the university as a national leader in medicine and biomedical research) with a constant focus on serving the state of North Carolina through the education of future medical leaders and through research and health care that improves all of our lives." – UNC-Chapel Hill Chancellor James Moeser

What has been your proudest accomplishment as dean?

I have always felt that the most important thing a dean does is recruit department chairs, and the most important thing the chairs do is recruit faculty members.

A number of our department chairs retired in the last few years, so we have seen a big change in department leadership. If I leave any legacy, I think it will be these new chairs, all of whom are quite outstanding. They are not only excellent in every aspect of the tripartite mission (teaching, research and patient care), but they have good business acumen, which is now a requirement for running a clinical department, especially. With the department chairs we



Dean. CEO. Vice Chancellor.

As Jeffrey L. Houpt, MD, prepares to step down from his varied roles, he reflects on a tenure that brought about considerable change at UNC.

have recruited, I feel that the future of the school is extraordinarily good.

Is it difficult to recruit the top people in their disciplines to department chair and faculty positions here?

It's very easy, actually, mainly because there is already so much good intellectual capital here.

Another big draw for some people is the ability to work between departments and schools more easily than they could at a lot of other places. We are less organized into little fiefdoms; there's more sharing and collaboration here. So, prospective department chairs see an opportunity to create programs here that might be more difficult to build in an institution where people don't work as closely together.

The fact that Chapel Hill is a pleasant place to live and work is also an advantage.

What role do physical facilities play in recruitment?

Facilities are very important. In fact, despite the intellectual climate and collegiality, if our facilities were not adequate, people wouldn't come. That's particularly true of people at the assistant professor level. They want to know that, wherever they go, they can be successful in their work and in building their careers. And in order to be successful, they need good space, good core facilities and good colleagues to collaborate with on the research side or to consult with on the clinical side. If a school puts all of those things together, it can recruit the very best people.

We are fortunate that we have been able to create good space in which people can do their work and build their programs.

How important are the new Department of Genetics and the Carolina Center for Genome Sciences?

Extremely important. The faculty made the decision to invest much more heavily in genomics and to create a new department. It was their view that we needed to do this in order to position ourselves for the future.

The people we have recruited into these areas are succeeding by every measure. They are securing an impressive amount of grant funding, and they are engaging in important collaborative work with departments across the campus.

The new department and center also have proved to be magnets for attracting more support for related programs. For example, because of our investment in genetics and genomics, a donor has pledged $25 million for proteomics. Another donor has given $5 million to develop the clinical arm of the genetics program.

Having great programs in genetics and genomics also means that faculty recruitment is easier across the board. When other departments in the school are looking for a new chair, the top candidates will see what we are doing in genetics and say, "I can be successful here. I can build a great program here."

Already, the infrastructure we have created for genetics and genomics has helped attract people here to lead our programs in cardiovascular biology and in several areas of cancer research. So, we are finding that these new programs have tremendous value for the entire institution as well as tremendous value in their own right.

When the legislature created the UNC Health Care System, it gave UNC Hospitals much greater flexibility in human resources, purchasing and other management functions. How important has that been?

Without that flexibility, there is a good chance the hospital would have hemorrhaged red ink three of the last four years. The hospital was not able to compete for nurses and other health care professionals or to develop the pay plans to keep them here.

The Triangle area has had a severe shortage of health care workers in the last few years. It is very likely that we would not have had enough caregivers to keep the hospital fully up and running if we were still only able to give the raises permitted under the state system.

The management flexibility has worked remarkably well. It has made us competitive. It also has helped make us attractive to other institutions, and we were able to acquire Rex Hospital in Raleigh. Among the benefits of that have been increases in market share and cost savings for both institutions. It has had a direct, positive effect on our bottom line.

Aside from assuring an adequate nursing staff, has the creation of UNC Health Care had any direct effect on patient care?

We have put a lot of effort into improving patient satisfaction, and we have had remarkable success in moving ourselves from a rather low ranking to above the eighty-fifth

percentile of like hospitals around the country. More recently, we have begun focusing on reducing medical errors and protecting patient safety.

Both of these efforts have been enhanced by the governance structure that we put together. From many perspectives, the creation of UNC Health Care was a vitally important event in the life of the hospital and the health care system.

"I think it is remarkable that Dr. Houpt was able to assume leadership of this new enterprise and make it prosper as it has. I am in profound admiration of his ability and of his quiet, understated way of getting things done. It's astounding what he has accomplished." – Jack Stevens, chair, UNC Health Care System board of directors

You had been dean and vice chancellor for about a year when the job of CEO of UNC Health Care was added to your portfolio. Is all that not too much for one person? How have you managed it?

In this very complex environment, I think it is important to have a single person who has final authority over teaching, research and patient care and who sees his or her job as balancing those missions. From a strategic standpoint, it makes sense to have a final arbiter who can settle any conflicts. Also, one person at the top is better able to make rapid decisions, and that is a huge advantage.

As for how one person is able to handle the demands of all three offices, you really have to define the scope of the job, focus only on those issues that really require your direct involvement, and delegate as much as possible. I don't attempt to be the hospital director; Eric Munson does a fine job of that. And I have very capable executive associate deans to whom I delegate a lot of responsibility. I view my job as working in any area that needs me at the time and being out front dealing with external forces.

What are some of the major issues or challenges that your successor will face?

One of the biggest issues is the stress that physician members of the clinical departments feel from decreased reim-

bursement, increased regulations from HIPAA, and the struggle to balance teaching with research with clinical care. They are under tremendous pressure. As margins shrink for clinical work, there is less time for teaching and research. We need to look at ways to help them. We can't correct all of the reimbursement problems, but maybe can help improve their efficiency and create a more responsive environment for them.

As physicians come under more and more economic pressure, we need to ask what ethical dilemmas the profession will face. We also need to keep working on reducing medical errors and protecting patient safety.

Another important issue is the nature of our partnerships with the corporate sector. For a medical school that does so much research and has the capacity to bring forward a great many products, what is the optimal relationship with industry? How will we pursue more of these entrepreneurial opportunities and, at the same time, preserve our research mission and the tenets of academic freedom?

In addition to the factors you have already talked about, what are some of the characteristics of this medical school that will appeal to your successor?

The school has some wonderful traditions. Foremost is collegiality. Another is the long-standing commitment to diversity. There's also a comprehensive breadth of scholarship and patient services here that I've found rewarding.

A focus on serving the state is something else that distinguishes this place. It has always had kind of a moral rudder in terms of committing itself to improving the health of the people of the state.

Those are a few of the defining features that make this school very, very special.

UNC Health Care launches national search for CEO and School of Medicine dean

The UNC Health Care System Board of Directors announced it has formed a search committee to select a new chief executive officer.

The person selected as CEO will also serve as dean of the UNC School of Medicine and the UNC vice chancellor for medical affairs, replacing Dean Jeffrey L. Houpt, who announced in May that he was stepping down. Dr. Houpt was the first CEO of UNC Health Care and was appointed to the position when the UNC Health Care System was created in 1998. He was named medical school dean and vice chancellor for medical affairs at UNC in June 1997.

"This is the first time UNC Health Care, as a combined system, has conducted a search for just the right person to take on this responsibility," said Charles Sanders, chair of the search committee. "So we will perform an exhaustive, nationwide search to find the best possible person to lead UNC Health Care and the School of Medicine."

An initial meeting of the search committee took place Aug. 4. The search committee will select two finalists and make its recommendation to UNC-Chapel Hill Chancellor James Moeser, the UNC Health Care Board and the UNC Board of Governors. If approved, the names of the two finalists will be presented to UNC system President Molly Broad, who will select one of the two.

Members of the search committee are:

BARNES

Peter Barnes, senior vice president and director of Human Resources at UNC Hospitals. He is co-director of the Compliance Program and has responsibility for numerous hospital departments. Other activities include serving as executive secretary of the Medical Center Task Force on AIDS and as a member of the Skill Development Center Advisory Committee, the Center for Employment Training Industrial Advisory Board in Research Triangle Park and the Triangle Workforce Information Group.

CHESCHEIR

Nancy Chescheir, MD, professor in the UNC Department of Obstetrics and Gynecology and program scientist at the National Institute of Child Health and Development and National Institutes of Health. Her professional affiliations include serving as an obstetric member of the American Board of Pediatrics Sub Board on Neonatology, a member of both the International Fetal Medicine and Surgery Society and the N.C. Obstetrical and Gynecological Society, and an examiner with the American Board of Obstetrics and Gynecology.

GREGANTI

M. Andrew Greganti, MD, professor of Medicine and vice chair of the UNC Department of Medicine. He is a member of the UNC Health Care System Board of Directors, the UNC Physicians and Associates board and the UNC Hospitals Medical Staff Executive Committee. He also is a fellow in the American College of Physicians and a member of the American Geriatrics Society.

Patrick Hines, PhD, a fourth-year medical school student. As a participant in the MD/PhD program at the UNC School of Medicine, he developed an interest in sickle cell disease and chose to pursue study of this disease during the course of his PhD work for the Department of Pharmacology. He also initiated a Sickle Cell Awareness and Education program with the NIH and Student National Medical Association. Previous honors include serving as national chair of the board of directors of the Student National Medical Association in 1999.

James Hyler Jr., vice chair, chief operating officer and board member of First Citizens BancShares Inc. and First Citizens Bank. He is co-chair of the Business Council for Fiscal Reform and serves as vice chair of the UNC Health Care System board. He is a member of the board of directors of the N.C. Citizens for Business and Industry and the board of trustees of the Boys & Girls Clubs of America.

James E.S. Hynes, chair of Hynes Inc., is a former member of the UNC Board of Trustees. He is a member of the UNC-Chapel Hill Foundation board and the Campaign Cabinet for the Carolina First Campaign and the $440 million Bicentennial Campaign for UNC. He also serves as a member of the National Development Council, the UNC Board of Visitors, the UNC Arts & Sciences Foundation board, and the Executive Committee for the Educational Foundation.

LEE

David Lee, PhD, professor and chair of the Department of Biochemistry and Biophysics and professor in the Department of Microbiology and Immunology at UNC. A member of the UNC Lineberger Comprehensive Cancer Center's Cancer Cell Biology Program, he also is co-director of the Histopathology Core Facility. His professional affiliations include the American Association for Cancer Research, the American Society for Biochemistry & Molecular Biology and the Association of Medical & Graduate Departments of Biochemistry.

MAGNUSON

Terry Magnuson, PhD, is the Sarah Graham Kenan Professor and chair of the Department of Genetics at UNC and director of the Carolina Center for Genome Sciences. He is a member of the Board of Scientific Overseers for The Jackson Laboratory, an elected member of the Society for Developmental Biology board of directors and co-editor-in-chief of Genesis, the Journal of Genetics and Development.

Karol Mason is a member of the UNC Board of Trustees and a partner in the law firm of Alston & Bird. While at UNC, she served as a member of the Board of Visitors, the Arts and Sciences Foundation and the National Development Council. She serves on the executive committee of Children's Healthcare of Atlanta and is chair of Wesley Homes Inc. She is a former board member of the High Museum of Art and the National Black Arts Festival.

PISANO

Etta Pisano, MD, FACR, is professor of Radiology and adjunct professor of Biomedical Engineering at UNC. She is a 2003-04 fellow of the Hedwig van Ameringen Executive Leadership in Academic Medicine Program for Women, Breast Imaging Fellowship program director at UNC and section chief of the Breast Imaging Section of the UNC Department of Radiology.

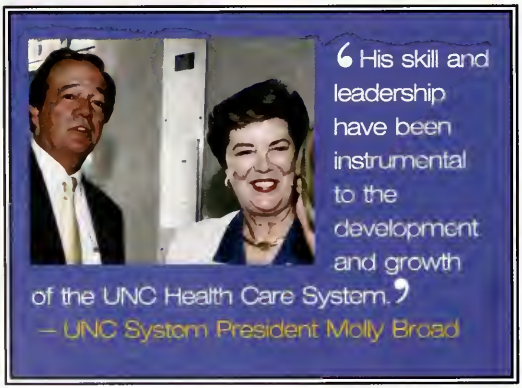
N.C. Sen. Tony Rand is a Democrat who represents the 24th District. He is a supporter of issues affecting UNC Hospitals and the UNC School of Medicine

Charles Sanders, MD, is the former chair and CEO of Glaxo Inc. Before joining Glaxo, he spent eight years at Squibb Corp., where he was vice chair and CEO of the science and technology group and chair of the board's Science and Technology Committee. Among his other professional affiliations, Dr. Sanders is a member of the Institute of Medicine of the National Academy of Sciences, chair of Project HOPE and chair of the Foundation for the National Institutes of Health.

John Stamm, DDS, is professor and dean of the UNC School of Dentistry and has been active in revitalizing the DDS, dental hygiene and dental assisting curricula, as well as the school's links with alumni, friends and dental organizations. He also has been responsible for initiating capital projects and updating the computer-based technology at the school. Dean Stamm is a fellow in the American College of Dentists, the American Association for the Advancement of Science and the Academy of Dentistry International. He has received honors from the N.C. Dental Society, the UNC Dental Alumni Association and the Dental Foundation of North Carolina.

What are your plans once you leave the dean's office?

I will be heading to my vacation house in the San Juan Islands near Seattle to relax, reflect and gear up for whatever the next phase of my life is going to be. Right now I think I will be returning to UNC to work in some capacity. I would like to come back and be a useful citizen.



How will you remember your years as dean, vice chancellor and CEO of the health care system?

It has been the best time of my professional life. I feel that we have accomplished a great deal and have positioned the school to grow through the next decade. Of course, I have had an enormous amount of help and the benefit of great working relationships.

All of the bright, dedicated people around here help make this a really great job. The students are terrific. They always energize me, as do the new junior faculty members.

The support I've had from the legislature, from the alumni, from President Broad and from Chancellors Hooker, McCoy and Moeser has been nothing short of spectacular.

special EVENTS

ORIENTATION

Class of 2007 begins MD program

A new class of students arrived at the School Medicine in August, embarking on the first four years of their medical education. While courses for first-year students began Aug. 18., medical school actually started Aug. 12 for the class of 2007 with four days of orientation.

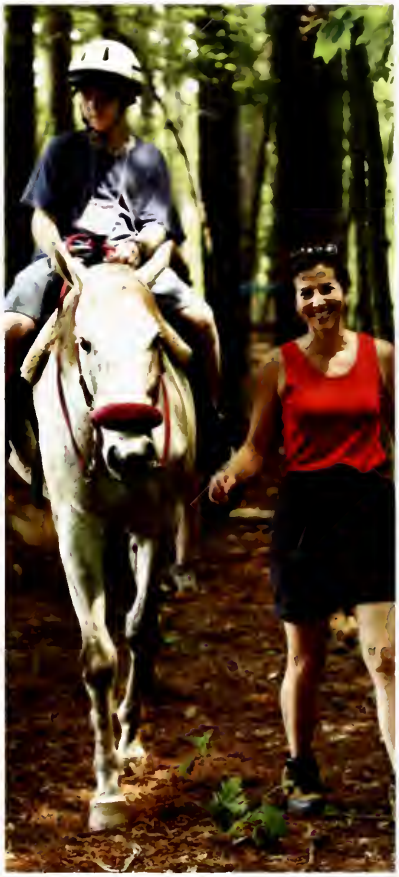
As usual, 160 students make up the class. There are 83 women and 77 men in the class this year ranging in age from 19 to 45. The average age of students is 23 years old.

Eighty-seven percent of first-year students are residents of North Carolina and have undergraduate degrees from some 60 colleges and universities, including UNC, Duke University, Yale University and Stanford University. As usual, a large number of students majored in biology as undergraduates, but students also have degrees in business, religion, art history and African studies, to name a few.

WHITEHEAD

The annual Whitehead Lecture was held Aug. 20. Robert Bashford, MD, associate professor in the Department of Psychiatry, gave the lecture, which was attended by more than 250 faculty, students and staff. Molly Blackley and Gordon Reeves, fourth-year medical students and co-presidents of the Whitehead Society, presented various academic awards during the event to both faculty and students.

Photo by Rebekah Temple



CAMP CELEBRATE

About 100 burn survivors ages 5 to 17 attended this year's Camp Celebrate May 9-11 at Camp Kanata in Wake Forest, N.C. The N.C. Jaycee Burn Center founded the annual event in 1981 to boost the psychological recovery of burned children.

"The psychological recovery from burn injury begins many months after the physical recovery," said Michael Peck, MD, the Burn Center's medical director. "That is one of the reasons that this camp experience is so important for children — being with others of their own age and with similar injuries helps them process the events in their own lives in ways that parents, teachers, psychologists and burn surgeons simply cannot hope to approach."

Photos by Brian Strickland

Correction

The Summer 2003 issue featured a photograph of class reunion and area campaign chairs for fiscal year 2002-03. Its caption incorrectly spelled the name of Paul Barry, MD '76. Dr. Barry was the co-chairs for the Guilford County campaign.

"There's a feeling we're in this together," said T.J. Sutton, a fourth-year medicine student.

In many ways, we **are not** that **different**

SPECIAL EDUCATION SECTION

After a landmark ruling on affirmative action by the U.S. Supreme Court, here's a look at how the School of Medicine uses a number of innovative strategies to produce a diverse group of talented, compassionate physicians

By Eleanor Lee Yates

Across the United States, the admissions offices at many medical schools are shifting gears after the U.S. Supreme Court's recent ruling on affirmative action. Those which used an automatic point system when considering a candidate's race must find new admissions strategies. But the decision also meant that medical schools in states where affirmative action had been banned now have the freedom to use race as a factor in admissions.

This flexibility was welcomed by medical school administrators across the country.

"A more diverse physician workforce will benefit every aspect of health care in this country," said Dr. Jordan J. Cohen, president of the American Association of Medical Colleges.

The UNC School of Medicine admissions office never used a point system for race, said Axalla J. Hoole, MD, associate dean for Admissions. Yet UNC has used many other strategies for increasing diversity.

From 1950 through 1998, the School of Medicine ranked ninth in the nation in graduating African-American doctors and was the only Southern school in the top 10. Historically black Howard University and Meharry University medical schools traditionally have turned out the most minority physicians. During the

same time, Dr. Hoole pointed out, UNC ranked fifth in the nation for graduating Native American doctors.

These statistics remain approximately the same today. The most recent graduating class of 160 students reflected about a 15 percent minority base.

McCartney

UNC's stellar track record results from a longtime awareness of the advantages of diversity. The School of Medicine boasts numerous programs and initiatives, such as the Medical Education Development (MED) program, established in 1974, which helps ensure that minorities and disadvantaged medical students succeed. The school's efforts for diversity among medical students and faculty stem from its longstanding mission statement, all in black and white. Cheryl F. McCartney, MD, executive associate dean for Medical Education, pointed to a paragraph in the School of Medicine's mission statement: "The School is committed to achieve representation of minorities and disadvantaged citizens in the health professions. To achieve this mission the School will improve access to education for careers in the health professions for disadvantaged applicants through educational enrichment programs. All qualified applicants will be considered for admission, with a special emphasis upon North Carolinians, regardless of race, gender, religion or other personal characteristics that are irrelevant to academic or professional qualifications."

"At UNC, we're seeking talented people, where they are. Many have not had the strength of education that some others have. So we try to target the disadvantaged, and some minorities may be disadvantaged," she said.

North Carolina has a minority population of over 27 percent — but only 5.2 percent of its physicians are African-American, 1.3 percent are Hispanic and 1.1 percent are Native American.

Minority physicians help increase access to medical care, Dr. McCartney stressed. Studies show that minority physicians are more likely than majority physicians to practice in underserved communities and to provide more care to Medicaid and under-insured minority patients than majority physicians are. Research has also shown that patients respond more openly to physicians and health care workers with similar backgrounds as themselves.

"Patients are more compliant, more open and care can be more effective," Dr. McCartney said.

There's another advantage for diversity in medical schools. Going to school with people of other ethnic backgrounds can shatter stereotypes students may have. Friendships with students of other cultures help new doctors understand and feel comfortable with everyone.

T.J. Sutton, a fourth-year African-American medical student from Kinston, said the camaraderie in his class appeared strong. He has not felt slighted or uncomfortable because he is African-American. "There's a common goal. Everyone here wants to be a physician. There's a feeling of 'we're in this together,' " Sutton said.

Tresolini

Many of the diversity initiatives fall under the watch of the Office of Educational Development. Several initiatives are administered through a federal Center of Excellence grant from the U.S. Health Resources and Services Administration to increase the number of underrepresented minority medical students and faculty. Programs help them become successful and facilitate student and faculty research on underrepresented minority health issues, according to Carol Tresolini, PhD, associate dean for Educational Development and director of the Office of Educational Development.

"The Center of Excellence grant came at a time of the state budget crisis when dollars were shrinking. It's allowed us to expand our programs of increasing diversity," Dr. Tresolini said.

The undisputed centerpiece is the MED program, which since 1985 has been under the direction of Larry Keith, assistant dean for Admissions, associate director of the OED and director of Special Programs. MED provides talented and other disadvantaged students interested in medicine and dentistry an intensive pre-enrollment summer program. Rising college seniors and postgraduates planning to apply to medical or dental school are eligible. During the nine-week program, students put in over 200 class and lab hours in courses such as gross anatomy, histology, physiology, clinical biochemistry, microbiology/immunology or dental theory and technique.

Keith said students receive individual attention to help sharpen their study- and test-taking skills. MED also offers pre-professional counseling and an array of semi-

nars and workshops and a general orientation to the medical and dental school environment.

In addition to targeting minority students, MED is also for bright but disadvantaged students from small, poor schools.

About 88 percent of MED students are accepted into medical school, with the majority attending UNC. Most students are African-Americans, but there are also Hispanics, whites and Native Americans. By all accounts, the program is a success. MED has been one of the most effective strategies by which the School of Medicine has achieved its high rate of diversity. MED African-American physicians make up 14 percent of the African-American doctors in the state. MED Native Americans also constitute 14 percent of the total percentage of Native American physicians in the state. And 38 percent of MED African-American and Native American physicians practice primary care in areas of North Carolina deemed lacking in health professional care compared to 16 percent of majority physicians.

Sutton came to UNC as a Morehead Scholar, playing defensive back for the football team. A biology major, Sutton took part in MED before his senior year.

"It was a very strenuous program. It's a simulation of the first eight weeks of medical school and at times it was overwhelming," recalled Sutton, who is considering a career in sports medicine or emergency medicine.

Shontell Thomas, a UNC Morehead Scholar from New Orleans and a second-year medical student, said MED confirmed her desire to be a doctor and provided her with a ready-made, supportive network at the medical school.

Travis Batts, a fourth-year medical student from Fayetteville, participated in MED after he received a degree in biochemistry from the University of Kansas. He said his MED study group honed his skills necessary for medical school and also provided friendship and emotional support.

Ernesto Olmedo, a native of Arequipa, Peru, became interested in a medical career when he volunteered for a medical mission while living in Virginia. When he moved to Chapel Hill for his wife to pursue advanced degrees, he learned about the MED program from a friend who worked in the medical school. He was accepted for the summer 2000 session. Now a third-year medical student and an American citizen, he works with patients of all ethnic backgrounds during his clinic rotations.

"I think Hispanic patients feel very comfortable with me, like African-American patients would with an African-American doctor," said Olmedo, who plans to go into emergency medicine or primary care.

The School of Medicine wants to attract more Latino students to reflect the growing Latino population and hopes to use pipeline programs such as MED.

Keith

Keith, himself African-American, has a genuine interest in the students' success and brings many of them back as MED teacher assistants.

"We see the MED students' leadership skills really improve. MED produces leaders," Keith said. Indeed, most MED students attending UNC are active in the extracurricular Student National Medical Association, (SNMA) a minority-oriented organization that spearheads community projects. Some projects include the Minority Association of Pre-Health Students (MAPS), which promotes minority enrollment in health professions schools; and the Health Professions Recruitment and Exposure Program (HPREP), a similar program geared to high school students; and the Youth Science Enrichment Program (YSEP), which enlightens elementary and middle school students on careers in the sciences and health professions.

SNMA also sponsors a supportive Big Buddy program, matching first-year minority students with second-year students. Roundtable talks and occasional get-togethers bring physicians, staff and students together for fellowship and professional networking. Many UNC students have held national SNMA offices.

The Research Apprenticeship Program (RAP) is another pipeline program under UNC's Center of Excellence grant. Disadvantaged and minority high school juniors and seniors interested in the science fields attend a seven-week summer program at UNC. There, they learn more about basic or clinical research through an apprenticeship with a research scientist. Keith uses his myriad ties with high school counselors and through Area Health Education Centers to publicize the program and in recruiting qualified applicants.

"One of things I love about the UNC School of Medicine is that it is committed to doing all the things it says in its mission," Dr. Tresolini said. "There are so many initiatives to be proud of."

The UNC School of Medicine is expanding its curriculum so future doctors will have classes on cultural differences. UNC's Health Sciences Library has been tapped a National Library of Medicine and now has more

extensive material on health problems of minorities.

According to Dr. Tresolini, the school facilitates both student and faculty research on minority health issues, such as high infant mortality. Most minority students do their clinical work in communities with insufficient health care professionals.

Georgette Dent, MD, associate dean for Student Affairs, thinks UNC is continuing to make great strides in its quest for diversity.

Dent

"As a public institution, we need to do our very best to serve the citizens of North Carolina. Our state is becoming increasingly diverse," said Dr. Dent, who is African-American. She thinks a growing number of UNC medical students are now more sensitive to other cultures. She recently heard a complaint of some students that they were not learning enough Spanish.

"They think it needs to part of the curriculum for all students. They want to at least be able to greet Hispanic patients if they are not fluent," Dr. Dent pointed out.

Over two-thirds of UNC medical students participate in some type of community service. Dr. Dent's office sponsors an activities fair each fall that showcases the many projects students can tackle.

"They can learn Spanish or those who are already proficient can work as interpreters at the student-run free clinic. Some get School of Medicine International Fellowships and travel to Africa or South America," she said. One student, who serves on the International Health Committee of SNMA helped organize an HIV education and prevention project in Ghana.

Many students teach in enrichment programs for minority students in local schools or conduct community blood pressure screenings often held in minority churches.

Dr. Dent has noticed that a disproportionate number of minority students choose to obtain a master of public health degree as well as a medical degree so they will be well grounded in public health issues in the communities they serve.

"You can go to any university medical center and find lots of very smart people. Here you have smart people with heart," Dr. Dent said.

In 1994, the School of Medicine initiated the Minority Faculty Development Program (MFDP). As originally conceived by then-Dean Michael Simmons, the purpose of the MFDP was to encourage department chairs to identify the best possible minority candidates for faculty positions and then assist the chairs in the recruitment of these individuals. During its initial eight years, the MFDP has been remarkably successful, bringing to the school 10 assistant professors (seven African-American women, one Hispanic woman, one African-American man and one Hispanic man), six of whom are currently receiving support from the program. Together, these individuals represent 38 percent of the minority assistant professors in the school.

Oversight of the MFDP is now chaired by a three-member advisory committee, chaired by Luis Diaz, MD, chair of the Department of Dermatology. The other members are Robert Golden, MD, chair of the Department of Psychiatry, and Rudolph L. Juliano, PhD, chair of the Department of Pharmacology. The committee named these young people "Simmons Scholars," all of whom are expected to be visible and recognizable role models for minority students, house officers and post-doctoral fellows.

"In addition to serving as role models, we expect the Simmons Scholars to succeed along an academic career path," said Eugene P. Orringer, MD, executive associate dean for Faculty Affairs and Faculty Development. "Their chances of success are greatly enhanced by these MFDP awards, which provide the scholars with the protected time that is critical for them to pursue their own areas of academic interest. A few of the scholars have focused primarily on teaching, but most are pursuing research careers. We are thrilled with the success that the Simmons Scholars have enjoyed to date, and we are confident that their success will continue into the years to come."

Administrators are continually mindful of ways to integrate cultural awareness at the School of Medicine. Yet another example is the Excellence in Teaching Series. Sandro Pinheiro, PhD, co-directs the series with Dr. Tresolini. He teaches a workshop called "Incorporating Cultural Competence Content in Your Teaching." A native of Fortelaza, Brazil, Dr. Pinheiro thinks outreach programs emphasizing education and achievement to Hispanic families could be pipelines for future diversity.

The School of Medicine is all about producing excellent doctors — excellent doctors with compassion, Keith said.

"We come to UNC and we're with people who are different," he added. "These people are white or black or Hispanic or Native American. And we usually find that in many ways, we are not that different."

Eleanor Lee Yates is a free-lance writer who resides in Wake Forest and is a former reporter for The Fayetteville Observer. *She is a frequent contributor to the* UNC Medical Bulletin.

OUR NEW WAY

SPECIAL EDUCATION SECTION

Major changes in School of Medicine curriculum result in 'one integrated ball' of education

By Tom Hughes

When the School of Medicine's classes for the 2003-2004 academic year got under way in August, second-year students embarked upon a curriculum that had been significantly revamped.

Students in the other years of the MD program have also seen some big changes recently, but nowhere have the changes been more sweeping than those in the second year. Most of the second-year courses for 2003-2004 were reorganized from a departmentally based teaching structure to one that is based on organ systems.

Previously, the department or division that governed a course taught what it felt was important, with little effort made to coordinate activities between groups teaching similar materials. The result was that to students the curriculum sometimes seemed disjointed and poorly organized. For example, cardiovascular diseases might be taught a month earlier or later than cardiovascular pharmacology, making it more difficult for students to comprehend the relationships between the two.

"One of the major problems we had in the second year was the coordination of course materials among the various departments. It was sometimes very confusing and very temporally spread out," said Nicholas Shaheen, MD, MPH, an assistant professor in the Department of Medicine who co-chaired the committee that overhauled the second-year curriculum. The other co-chair was Kathleen Rao, PhD, a professor in the Department of Pediatrics.

The idea behind the reorganization of courses was to bring the disparate strands together to teach them "in one integrated ball," Dr. Shaheen said. Now, to take the cardiovascular course as an example, it incorporates content that had been spread out across the pathology, cardiovascular and pharmacology courses. Other courses that have been similarly integrated and reorganized based on organ systems include the endocrine, musculoskeletal, reproductive, respiratory, skin and urinary courses.

The School of Medicine had been moving towards such a change for about five years, and the second year curriculum change committee worked for about a year and a half to have it in place in time for 2003-2004. The result, Dr. Shaheen said, was the biggest change the second-year curriculum had seen in 20 to 25 years.

"We're excited about it," he said. "This year our students will be going to a better medical school as a result. And it's only going to get better as we refine it."

Cheryl McCartney, MD, executive associate dean for medical education, said that the curriculum change process formally started when Jeffrey L. Houpt, dean of the School of Medicine, commissioned a task force of department chairs to prescribe a set of desired outcome competencies for graduating medical students and to revise the curriculum governance structure.

These competencies are in line with a national trend in which outcomes, rather than course content, are the primary focus. They were developed based on work by the Medical School Objectives Project of the American Association of Medical Colleges and the Accreditation Council on Graduate Medical Education/American Board of Medical Specialties. They also built upon "what we inherited from previous curriculum changes," Dr. McCartney said.

The changes that resulted "will help the students put it all together," she said.

Dr. McCartney also stressed that students participated formally in the curriculum review process and their contributions were extremely important. "We couldn't have done this without them," she said.

Two students who were heavily involved in the curriculum change process were Molly Blackley and Gordon Reeves, now fourth-year students, who serve as co-presidents of the Whitehead Medical Society, which is the School of Medicine's student government body. They were elected into student curriculum representative positions in their first year and have been active in the curriculum change process ever since.

Reeves said that while the second-year curriculum revision is the broadest he's seen, "each year we've seen changes and improvements made."

Blackley said the second-year restructuring was preceded on a smaller scale in 2001-2002, when pathology content was incorporated into the gastrointestinal course. Previously, the gastrointestinal pathology material was covered in the separate pathology course.

"I think because of the success of that integration … other course directors started seeing that this was a concept that was possible. And it was effective. It worked well."

Once that excitement caught on with faculty and students, Reeves said, the work of the second-year curriculum change committee "went much more rapidly than I think we had expected."

Blackley added that, in her opinion, "most students would agree there have been many changes that have come from student recommendations regarding the curriculum. I really feel that one of the main reasons the curriculum has been changed effectively is that the faculty and administration has been extremely receptive to hearing students' input."

Outside of the second year, the next most significant changes took place in the first year. Beginning with the 2002-2003 academic year, human anatomy and embryology, which until then had been taught as two separate courses, were combined into a single course. Also, a course in genetics and molecular biology was added to the first year curriculum, because of the increasingly important role of genetic research and therapy in modern medicine.

The anatomy course – traditionally the biggest hurdle students face in the first year – used to occupy all of the fall semester and the first half of the second semester, meeting twice a week. Now the combined anatomy and embryology course meets three times a week and is confined to the fall semester.

"Because the course is compacted into a shorter period of time, the embryology can be related temporally to the anatomy and it's less disconnected," said Noelle Granger, PhD, a professor in the Department of Cell and Developmental Biology and one of the two course directors. The other is Kathleen Sulik, PhD, also a professor in Cell and Developmental Biology.

"The students can study the embryology side by side with the anatomy," Dr. Granger said. "And that's what we wanted to do all along, because knowing how these structures form is integral to their understanding of how they come to be in the adult."

In the old anatomy course, students took just two exams fall semester, a midterm and final. The new course is broken into four blocks, with four exams. This enables students who may have trouble mastering the material an earlier opportunity to adjust their study techniques, giving them a better chance to pass and do well in the course.

Another significant change took place in the pediatrics clerkships of the third year. Students in the clerkships work at four different sites, with eight at a time doing inpatient clerkships at UNC Hospitals.

Previously, the attending pediatrician was responsible for teaching the students during their inpatient clerkships. But in practice, the clinical attendings were so busy with patient care that it was difficult for them to ensure that the students were getting a worthwhile learning experience.

The solution, implemented in January 2002, was to assign a pediatrician to serve one month at a time as the "teach attending" physician, said Julie Byerley, MD, MPH, a clinical assistant professor in the Department of Pediatrics and pediatrics clerkship director.

The teach attending physician sits down with students from noon to 1 p.m., three days a week, to talk about the inpatients the students are following in more detail than would be possible if the physician were doing rounds at the same time. "We think that this is an innovative program to give the students the detailed type of teaching that we would like for them to get," Dr. Byerley said.

There were additional curriculum changes that could not be discussed in the space available for this article. In addition, the faculty intend for curriculum change to continue as an ongoing project.

As Dr. McCartney described it, "The whole feeling of this should be that it's dynamic rather than static."

The means to an end

Faculty member uses collaborative style to mentor tomorrow's physicians

SPECIAL EDUCATION SECTION

By Tom Maltais

During his tenure at the School of Medicine, Marco Alemán, MD, associate professor, General Medicine, has used his approachable style of leadership to help weave feedback from students and faculty with his long-term vision for the needs of the community they serve. He does this not so much with a "follow my lead" approach but more with a "lets collaborate and reach our goal together" approach.

Dr. Alemán's management style was first noticed upon his arrival in Chapel Hill in 1997 when he became the Internal Medicine consultant to the Medicine Practice and Community (MPAC) course, whose curriculum was based on paper-based problems with case discussions and offered little personal interaction. Years later, when he inherited the Introduction to Clinical Medicine (ICM) two-year course was still in its infancy and needed help working through its early growing pains.

The ICM course covers twenty percent of the total contact hours attained by medical students during their first two years. It is designed to prepare students to collect clinical data through patient interviewing and physical diagnosis, to evaluate the data with clinical reasoning and problem solving techniques and then to communicate it to colleagues and patients.

Much like re-cutting a puzzle, Dr. Alemán has used input from students and faculty to rework the curriculum in a manner that keeps its focus on the big picture while making it easier for students to put the pieces of their medical education into place. The first year students participate in ICM sessions that integrate material from their anatomy and biochemistry

Marco Alemán, MD

courses. Also, rather than having their noses buried in text, second year students now find themselves learning in a hospital setting during "On the Ward" sessions which fuse bedside physical diagnosis teaching with active/problem-based learning with the aid of their tutors. The change is to create a stronger emphasis on techniques and provide an enhanced physiologic basis for the physical exam while challenging students to think as they interview and examine a patient, creating new hypotheses and problem lists, as a clinician would.

"We are now able to fuse problem-based learning techniques with prototypical ones to teach students how to take a patient's history and perform an exam," said Dr. Alemán. "We've taken it a step further by now requiring each student to follow their patient exams with a literature search about their patient's illness, using classroom texts or resources available in the Health Sciences Library. This is followed by a complete write up and oral presentation to their tutor."

Other changes to the first year curriculum provide greater integration with basic science courses such as Anatomy and Biochemistry. Changes such as these garner students a greater appreciation for the clinical relevance of the basic science material learned in the first year.

"I've had a chance to see him take a very innovative approach to the design and teaching of the ICM course," said Stephen Chaney, MD, Course Director in Biochemistry and Co-Chair with Dr. Alemán of the First Year Course Directors Committee. "Under his leadership and that of Michelle Forcier, MD, MPH, the course has improved significantly, as evidenced by the steady improvement in student evaluations of the course."

Other, across-the-board changes made to the second year curriculum have given faculty such as Dr. Aleman opportunities to develop new teaching tools to enhance student learning.

"The change to how courses are blocked together has opened up entirely new doors for us," said Aleman. "We can now do things such as host workshops that integrate things such as the clinical exam and clinical reasoning, correlating them to the pathophysiology and other courses."

One of the things that gives Dr. Alemán the most satisfaction from his job is seeing physicians in training like fourth-year School of Medicine student Alison Kavanaugh, MD, improve their skills and learn how to care for their future patients.

Dr. Alemán's enthusiasm for teaching and modest manner are traits he has carried with him throughout his medical career. Prior to his arrival in the Tar Heel state he was presented with three teaching awards from medical students and residents at Rush-Presbyterian St. Luke's Medical Center in Chicago where he served as a resident and then clinical faculty member.

Aside from his love of teaching, another of Dr. Alemán's passions began to take shape while serving as a Spanish interpreter at Children's Memorial Hospital while still a undergraduate student at Loyola University, Chicago.

"I have always thought that it was very important for physicians to have a solid understanding of not only the Spanish language but of Latino culture," Dr. Alemán said.

Feedback from medical students in Chapel Hill confirmed Dr. Alemán's feelings. As the Latino population in

Marco Alemán, MD

Hometown: Born in Lima, Peru, now lives in Chapel Hill

Family: Wife, Cindy Clauss, MD, son Daniel, 2 and daughter Emily, 6

Personal interests: Photography, soccer, Andean music

North Carolina started to skyrocket in the mid 90's, so to did the requests from students to provide them with better tools to care for Spanish-speaking patients. Starting in 1999, with great collaboration from the UNC Department of Romance Languages, Dr. Alemán helped create the School of Medicine's first Medical Spanish program.

"The response to the classes was immediate," Dr. Alemán said. "The program quickly grew from one class to three with students taking beginning, intermediate and advanced levels of Spanish language proficiency and culture."

The positive response to the new courses prompted Dr. Alemán to move forward with his long held hope of developing a clinical connection with his home country of Peru. Dr. Alemán's family immigrated to Chicago, from Lima, Peru when he was twelve years old. His father, a physician who went on to practice in the windy city, decided it was best to move his family out of Peru, which had recently undergone a coup de teat.

"I spoke broken English when I arrived here. My mother was an English teacher in Peru and much to her delight, I enjoyed the subject."

With the help of Dr. Luis Diaz, Chair, Department of Dermatology, and also a native of Peru, Dr. Alemán has established a partnership between the School of Medicine and the Universidad Nacional de Trujillo, Faculty of Medicine in Peru.

To date, the school's Dean, Ricardo Caceda, MD, and his physician wife have taken seven School of Medicine students into their home. Dean Caceda has also helped these students gain opportunities in nearly any field and clinical experience in Peru.

As part of the program Drs. Alemán and Diaz have arranged for participating faculty at UNT in Peru to have access the School of Medicine's library system and the N.C. Area Health Education Centers. Dr. Diaz has also sent books and other learning tools to Peru as well as created a fund with the medical foundation to help expand funding at UNT.

> "It's my responsibility to examine every method and to keep an ear open to every voice that helps expand the minds of my students and hopefully make them better physicians in the end."

It is Dr. Alemán's hope that this partnership will lead to the establishment of a true 'sister' medical school with which the School of Medicine regularly exchanges students and faculty.

Closer to home, Dr. Alemán is currently working with other physicians to create and direct a student-run free clinic for Latinos in Siler City, NC, a community whose Latino population has grown enormously in recent years.

A measure of the respect given to Dr. Alemán's efforts was demonstrated in his selection as the School of Medicine's 2001 nominee for the Association of American Medical College's Humanism in Medical Education Award. Keeping with the spirit of the award, Dr. Alemán donated the monetary award he received for his nomination to the Peru Exchange Program.

His plans for the 2003-2004 academic year include hosting additional workshops in cardiovascular medicine – taking a closer a look at normal and abnormal processes. He will also be implementing a complex clinical case that will have Latino patients serving as protagonists to help sharpen student's language and cultural competencies.

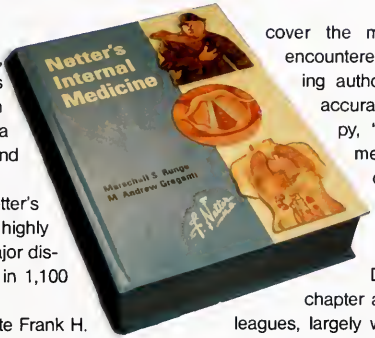
"We have to be open to exploration and modification to what we do. There is always a great deal of new, important information along with different educational techniques that need to be utilized. It's my responsibility to examine every method and to keep an ear open to every voice that helps expand the minds of my students and hopefully make them better physicians in the end."

SPECIAL EDUCATION SECTION

The better of Netter

Illustrated internal medicine book features UNC faculty and famous artwork

By Leslie H. Lang



For the first time in 15 years, busy and time-pressured doctors seeking the most current information on everyday medical problems have a solid alternative to the exhaustive and massive texts currently in use.

Now they can turn to Netter's Internal Medicine, a practical and highly visual clinical guide that covers the major diseases of specific medical specialties in 1,100 pages.

The unique artwork of the late Frank H. Netter, MD, considered the foremost medical illustrator of the 20th Century, lavishly illustrate the book's 152 chapters. Dr. Netter's works are found on the walls of doctor's offices, grade school bulletin boards and in the textbooks of medical, nursing, dentistry, and pharmacy students worldwide.

"Internists, both generalists and subspecialists, now must process a seemingly endless amount of information in their daily life to provide their patients with the best possible care," said the book's co-editor," Marschall S. Runge, MD, professor and chair, department of medicine at the University of North Carolina at Chapel Hill School of Medicine. "This challenge is magnified by the demands of increasing patient volume and the attendant paperwork, which constrain the time to read."

Dr. Runge and co-editor M. Andrew Greganti, MD, professor and department of medicine vice chair said the possibility of using Dr. Netter's artwork in a textbook of general internal medicine allowed them to see "a great opportunity to provide a useful, practical resource" to making learning an easier process for clinicians, whether they be students, hospital house staff or practicing physicians. It also provides an ongoing source for educating patients.

Published by Icon Learning Systems, this is the first new internal medicine text in more than a decade. The book is designed to present key clinical information in an easy-to-use, quick-study format. This is in sharp contrast to the exhaustively detailed, 2,500-page texts such as Harrison's Principles of Internal Medicine.

In planning the book, Drs. Runge and Greganti said they wanted to avoid writing another exhaustive text that would only add to "data overload," aiming instead to provide the essentials of clinical practice in a readable and understandable format.

According to Dr. Greganti, this meant choosing to cover the most common clinical problems encountered by practicing internists and asking authors to provide sufficient detail for accurate diagnosis and selection of therapy, "along with insights into complex medical problems, in concise yet complete chapters that can be read and understood in a short period of time."

Given that charge, Drs. Runge and Gregante sought chapter authors from among their UNC colleagues, largely within the department of medicine. First, they asked themselves who was it that others at UNC considered "the person to call" regarding a particular clinical problem. They then asked these medical experts to distill reams of information to the most important and useful facts and to write about a topic in a well-organized and logical format.

"Thus, this is a text written by authors from diverse clinical departments in a single institution, a medical school well known nationally and internationally for its scholarly productivity both in research and clinical practice," Dr. Greganti said.

By taking advantage of Dr. Netter's unique illustrations, the editors said they learned an important lesson, "that thousands of words cannot describe what one of his plates depicts."

In each chapter, the plates are used to enhance the reader's understanding while serving as pictorial outlines of chapter content. In some cases, Dr. Netter's illustrations were revised to reflect the newest concepts in the field. Two artists considered worthy successors to Dr. Netter, John A. Craig, MD, and Carlos A.G. Machado, MD, created additional illustrations.

"Most practicing physicians have come to realize there is no single best way to 'keep up' and that the efficient use of time is key," Dr. Runge said.

"We believe we have created in Netter's Internal Medicine a highly useful resource for all physicians, both generalists and subspecialists, who need to remain current in internal medicine — from the young to the old, from trainees to experienced practitioners."

Recently, Francis Netter Carlson, Dr. Netter's daughter, gave UNC an extensive collection of his original sketches and research papers while also pledging endowed funds in her father's name to support the university's Health Sciences Library.

Giving back

SPECIAL EDUCATION SECTION

Third-year medical student at UNC 'exemplifies' community service in action

By Bernadette Gillis

When choosing among medical schools, many students make their decisions based on a number of factors including, campus life and academic reputations. But for Amy Hurwitz, finding a school that would allow her to study medicine while serving the community was high on her list. Once she learned of the School of Medicine's commitment to community outreach, Hurwitz had no doubt that she wanted to attend UNC.

Now in her third year of medical school, Hurwitz has taken full advantage of the community service opportunities at the school. During her first year, she became involved with the Student Health Action Coalition. The program, which has been in existence for more than 35 years, originated in the School of Medicine and is now an effort of students from each of the health affairs schools: Dentistry, Medicine, Nursing, Pharmacy, Physical Therapy, Public Health and Social Work. The student group operates free medical and dental clinics for the underserved, provides home health visits for the elderly and funds and builds one house per year for Health for Habitat.

Amy S. Hurwitz

Education: Tufts University, Bachelor's degree in Biology and Psychology; Boston University, Master's degree in Anatomy and Neurobiology

Awards and honors: Novartis Award Recipient, John B. Graham Student Research Society, Eugene S. Mayer Community Service Honor Society, Loyalty Fund Scholar, Endowment Grant Recipient, National Merit Scholar

Personal interests: Sports, especially field hockey

"When I came across Carolina's Web site and read about the SHAC clinic and how it was student-run, I was completely taken away by that idea," Hurwitz said. "It was one of the main reasons I applied to Carolina."

Cheryl McCartney, MD, executive associate dean for medical education, said she was impressed by the fact that Hurwitz was attracted to the School of Medicine largely because of the SHAC clinic. "She knew all about our SHAC clinic, the longest continuously running free clinic in the country run by medical students to serve indigent patients, and she wanted to be part of it," Dr. McCartney said.

Hurwitz worked at the front desk of the medical clinic during her first year, greeting patients and making charts. Then during her second year, she became one of two general coordinators, overseeing the operations of the SHAC program. Her duties as general coordinator included acting as a liaison between leaders from the health affairs schools and supervising the medical clinic each Wednesday. She also worked with the finance coordinator to develop the new SHAC endowment, which will allow SHAC to become self-sufficient.

"It was a really tough job," she said. It also was an amazing job. To have that much responsibility so early in my medical career was incredible."

Adam Goldstein, MD, associate professor of Family Medicine and faculty advisor for the SHAC program, said as general coordinator, Hurwitz had a substantial impact on the program. "One of the most important things she did well, if not better than her predecessors, was focus attention on the financial aspects of the program," he said. "She helped put it on the best financial grounds ever by publicizing SHAC through a newsletter and supporting an endowment."

Aside from gaining leadership skills, Hurwitz said the SHAC program taught her a great deal about the rewards of caring for patients. "I'd go to the clinic on Wednesday nights and see 15 to 20 patients who were really helped. We would perform physicals on kids and adults who were being kept out of school or off the job because they couldn't afford to see a doctor. We were providing very simple, yet crucial, care. It was very satisfying work."

Hurwitz, who wants to start a free clinic on her own one day, said she also found it satisfying to be a part of the overall learning process that the SHAC program

provides. "The SHAC clinic serves two populations. We serve the patients by giving them health care, but we also serve the students by giving them a place to hone their skills. It's a learning model for the students. It's something that the students are really involved in and very proud of."

Hurwitz stressed that she alone cannot take credit for SHAC's successes during the past year. "The real work and greatness of the organization comes from the aggregate efforts of over 200 medicals students in any given year. My fellow leaders were amazingly committed, not just to their individual projects within SHAC, but also to the progress of the organization as a whole."

Because of the increasing demands of the last two years of medical school, most students are only involved with the SHAC program during their first and second years. Hurwitz said as her duties as general coordinator came to a close after her second year, she became worried that her community service involvement would have to be put on hold. However, a new opportunity arose.

> "I've been blessed with the opportunities I've been presented, and so I feel a drive to offer that opportunity to other people."
>
> – Amy Hurwitz

The Department of Family Medicine received a grant to create the Education for Lifelong Service program, which helps medical students provide service to the community and teaches them to translate those experiences into a lifetime of service. Dr. Goldstein, co-director the program, appointed Hurwitz to be a member of the advisory board.

"I invited Amy to be a student representative on the board because of her commitment to service and her knowledge of working with the community," Dr. Goldstein said.

"I am grateful to be able to continue my involvement in community service, even if it's only in the training of students," Hurwitz said. "The ELS program ties the medical school community to community service, which is the relationship I love most about our school."

Hurwitz's devotion to serving her community has not gone unnoticed. During the school's annual Community Service Day, Hurwitz presented a progress report about the SHAC program and was inducted into the Eugene S. Mayer Community Service Honor Society. Hurwitz remains modest about the recognition, noting that the thing she enjoyed most about attending Community Service Day was learning about the projects of other students. "It's amazing how many of our classmates are involved in community service," she said.

Hurwitz said her motivation for becoming so involved with the medical school's community service programs comes from a genuine desire to help those less fortunate. She said she has come to recognize that the lack of access to care can interfere with many people's ability to work, raise families and live safely.

"A simple amount of health care will help the underserved achieve what all Americans have been told that they can achieve – that if you work hard you will be successful," she said. "Access to health care can affect all aspects of one's life. I really want to help people at that level."

In addition to helping the underserved, Hurwitz said she thinks it's important to reach out to minorities. Because of her Puerto Rican and Jewish background she said she has seen how access to educational opportunities can affect people's lives. "The opportunities presented to each side of my family are very different, and the outcomes on each side are very different," she said. "I know that has nothing to do with the individual capacities of these people, but instead it has to do with the opportunities they've been presented."

She added, "I've been blessed with the opportunities I've been presented, and so I feel a drive to offer that opportunity to other people."

Hurwitz has served as the chair of the Student National Medical Association's program for mentoring undergraduate minority students interested in health careers. Also during the summer of 2002, Hurwitz worked as a teaching assistant for the Medical Education Development program, which helps disadvantaged and minority students prepare for success in health professional schools. The nine-week program gives undergraduates the opportunity to take courses such as histology and biochemistry. She said in addition to helping these students become better medical school applicants, such programs helps benefit society as a whole.

Mark Hill, MD, an emergency medicine resident, and Amy Hurwitz review a patient's chart. Hurwitz said the medical school's community outreach programs have strengthened her commitment to helping those less fortunate.

"I think by training more physicians who are minorities or who come from disadvantaged backgrounds themselves, we're definitely going to improve the care of those populations because a greater percentage of them are going to go back and care for similar populations," Hurwitz said.

Dr. McCartney said Hurwitz's efforts to help minority and disadvantaged students have had an impact on faculty members as well. "She is a mentor and role model for underrepresented minority students. Her articulate feedback to faculty and administrators stimulates us to learn about our own biases and improve our cultural humility in an increasingly diverse community."

Because of her desire to help minorities and the underserved, Hurwitz has developed an interest in Emergency Medicine. "Unfortunately the emergency department sees a lot of patients who are underserved," she said. "Often people come to the emergency room because they haven't had access to preventative health care."

Hurwitz is currently working on a research project with Jane H. Brice, MD, MPH, assistant professor of Emergency Medicine. Hurwitz, Dr. Brice and other researchers are examining the role of 911 dispatchers in the timely diagnosis and triage of stroke victims. The research project has already received national attention.

Even though Hurwitz had the desire to succeed in academics and community service before coming to UNC, she credits the School of Medicine with giving her the opportunity to really make a difference. "I didn't have to reinvent any wheels," she said. "I can work with these programs that have been in place for years."

Dr. Goldstein agreed by pointing out that any student can take advantage of the school's programs. "With students like Amy and faculty who continue to press the envelope, we continue to have one of the premier medical schools. We don't just teach community service. We put it into action, and Amy exemplifies that."

UNC Center 'makes life easier' for referring physicians, patients

By Tom Hughes

Nov. 7, 2002, was a day that Mary Lee and her family will never forget.

On that day Lee, a resident of Garner, N.C., was present in the operating room to witness the birth of her grandson, Bryan Michael Lee, at UNC Hospitals. But when the day began, neither she nor Bryan's 24-year-old mother, Jamie Marks, knew that a baby was on the way.

They soon learned the surprising news that Marks was at least six months pregnant after Lee accompanied her future daughter-in-law during a visit to the UNC Specialty Women's Center in Raleigh. Marks had been referred there for an ultrasound after an earlier appointment at Mid-Carolina Obstetrics & Gynecology, also in Raleigh.

Lee said that as soon as a physician at the UNC clinic saw the ultrasound images, he said, "Call an ambulance. His head's too small; his heart's too big."

At that point, the UNC Center for Maternal and Infant Health stepped in to coordinate the delivery and postpartum care of this unborn child with multiple, complex medical problems.

Established in 1999, the center delivers integrated services that families need during and after pregnancy, such as diagnosis, consultation and expert care to avoid or lessen the severity of birth complications. It is the first center of its kind in the country.

The center coordinates an experienced team of nearly 200 doctors, researchers, and staff. The team includes subspecialists from a wide range of disciplines, including maternal-fetal medicine (MFM), pediatrics (cardiology, critical care, genetics, neonatology, nephrology, neurology, pulmonary), radiology, surgery (cardiothoracic, neurosurgery, otolaryngology, pediatric and urology), physical medicine and rehabilitation, the UNC Craniofacial Center, nursing, social work and pastoral care.

Thomas Trevett, MD, a fellow in maternal-fetal medicine at UNC, leads discussion of a patient case at the center's weekly perinatal conference.

Photos by Brian Strickland

Lt. Col. Paul Whitecar, MD, performs an ultrasound at Womack Army Medical Center. Dr. Whitecar has referred more than 20 patients to UNC since 2001.

"The goal of the center is to provide integrated, multidisciplinary, comprehensive care to the patient and her family starting before the infant is born, when the mother is still pregnant, and providing services until the baby's first birthday," said John Cotton, MD, an associate professor in the Department of Pediatrics and pediatric co-director of the center. The obstetrics co-director is Kenneth J. Moise, MD, Upjohn Distinguished Professor of Obstetrics and Gynecology and chief of the Division of Maternal-Fetal Medicine.

"With today's busy schedules in a medical center, high-risk obstetricians and pediatric subspecialists rarely have the opportunity to sit in the same room to discuss their patients," said Dr. Moise. "Our center affords us the opportunity to treat the fetus as a patient while still addressing the needs of the mother."

In Bryan's case, the center's maternal transport program brought his mother to UNC Hospitals where Garrett Lam, MD, then one of the center's fellows in maternal-fetal medicine, delivered Bryan by an emergency Caesarean section.

"They had to get him out quickly," Lee said. "He was dying. His heart was doing all kinds of strange things."

Bryan had four problems that required significant postpartum care, including surgery. The most serious was transposition of the great arteries, a congenital heart defect. This was corrected in a type of open-heart surgery called a Rastelli procedure, performed by

Michael Mill, MD, professor and chief of the Division of Cardiothoracic Surgery.

In addition, Bryan was born with a cleft lip and palate. Wolfgang Losken, MD, a clinical professor in the Division of Plastic Surgery, operated on Bryan to correct these problems.

Also, Bryan has antithrombin-III deficiency, which greatly increases his risk of blood clots. For this condition, he now receives twice-daily injections of the blood thinner Lovenox. Geoffrey Allen, MD, an assistant professor in the Department of Pediatrics, directs Bryan's care for this condition.

Finally, Bryan had otitis media, a middle ear infection, which did not improve with medication therapy. Therefore, Amelia Drake, MD, chief of the Division of Pediatric Otolaryngology, installed tympanostomy tubes to deal with this problem.

Throughout the entire ordeal, Lee said, the center's care coordinator assigned to Bryan's case was a tremendous help. Mothers and babies with complex medical problems often require the services of several different specialists. When these patients go to UNC for care, it's a great help if they can get all of those appointments scheduled for the same day. The center's clinical care coordinators, comprised of three registered nurses and a social worker, work to ensure that patients and their families receive this approach.

The clinical coordinators are technically trained to address the kinds of medical complications that the center's patients face. They also have extensive neonatal and high-risk obstetrics experience, and one coordinator is bilingual.

Praise for the care coordinators, and for the center in general, is something one hears repeatedly when talking to patients and families who have been served by the center and the physicians who referred those patients to UNC.

One such physician is Lt. Col. Paul Whitecar, MD. Dr. Whitecar is chief of obstetrics and gynecology and the only maternal-fetal medicine specialist at Womack Army Medical Center, the hospital at Fort Bragg, N.C., which delivers more babies each year than UNC Hospitals.

Dr. Whitecar knows the center and its work quite well. He completed a fellowship in maternal-fetal medicine at UNC from 1998 to 2001. Since taking his position at Fort Bragg, he has been very happy with the services provided by the center to him and the patients he has sent to UNC.

"It's made my life a lot easier," he said. "First of all, they take great care of our patients. I think that we have a good relationship with them. Moreover, the patients love it. I've heard nothing but positive comments from the patients I've referred there."

It's a sentiment echoed by other referring physicians across the state, including Diane Duffy, MD, a pediatrician with offices in Mebane and Burlington who completed a residency in pediatrics at UNC from 1989-1992. One patient Dr. Duffy referred to UNC was a child born prematurely while the mother was traveling in another state. When the mother returned home, she came to Dr. Duffy for follow-up care. But the child was born with a cyst that interfered with its breathing, a condition beyond the scope of her practice. So, she referred the child to UNC, and the center arranged for surgery to remove the cyst.

"That was wonderful," Dr. Duffy said of the center's work in that case. "They really were helpful."

Dr. Whitecar says the center takes great care of the patients he refers to UNC.

Who are the patients of the UNC Center for Maternal and Infant Health?

Since Aug. 1, 2000, the UNC Center for Maternal and Infant Health has provided services to over 400 women who were prenatally diagnosed with a fetal anomaly. The center has enrolled over 400 infants who have multiple, complex medical conditions. About 50 percent of the infants receiving center services have been transported to UNC from community hospitals. The center coordinated care for almost 800 women who were transported prenatally to UNC due to a pregnancy-related emergency. Most of the center's patients have come from 46 of North Carolina's 100 counties. However, patients from six other states and Canada have come to UNC to receive the specialized, interdisciplinary services that the center offers.

For maternal transport patients, the most common reasons for the transport were preterm labor, preterm premature rupture of membranes, preeclampsia and chronic hypertension. The most frequent fetal diagnoses were gastroschisis, meningomyelocele, bilateral hydronephrosis, atrioventricular septal defect, hydrocephalus and Dandy-Walker variant. For infants referred to UNC after birth, the top diagnoses were patent ductus arteriosus and ventricular septal defect.

Fourteen percent of the mothers and 16 percent of the infants were Latino, and 19 percent of the women and 22 percent of the infants were African-American. Annually, about 53 percent of the center's patients are low income (on Medicaid or have no insurance). During the last year, the center has seen a significant increase in the number of women and infants being referred from N.C. military bases. Eleven percent of the mothers and 19 percent of the infants were from military families.

Getting to the heart of things

UNC's new ambulatory heart center opens for business

By Tom Hughes

The UNC Heart Center began patient care in a new ambulatory care facility on July 15.

The center, located in the Meadowmont community in Chapel Hill, is a 7,000-square-foot, patient-centered facility that serves as the cornerstone of the clinic settings offered by UNC for cardiovascular care. It includes 12 exam rooms and three procedure rooms, and is conveniently located near The Wellness Center at Meadowmont, which houses UNC's cardiac rehabilitation program.

"The opening of this clinic is great news for people in the Triangle who need cardiovascular care," said Magnus Ohman, MD, chief of UNC's Division of Cardiology and director of the UNC Heart Center. "It will provide the best possible medical care in an environment that emphasizes the dignity of each individual."

An estimated 8,000 to 10,000 patients a year will be seen in the new clinic for a full range of services provided by an expert team of doctors, nurse practitioners, nurses and other medical staff. These services include education on prevention and management of cardiovascular disease, tests such as stress and oxygen consumption for patients with heart failure, and a broad range of diagnostic procedures such as electrocardiogram, echocardiogram, stress EKG, stress ECHO and enhanced external counterpulsation (EECP). Patients who need additional services can then receive their care

Photos by Brian Strickland

The new UNC Heart Center is located in the Meadowmont community of Chapel Hill.

Above, Carla Sueta, MD, PhD, listens to a patient's heart as Magnus Ohmann, MD, cardiology division chief, walks down the hall. Below, Julie Ruch, RN, MSN, ANP, discusses lipid management with a patient.

at UNC Hospitals, the Wellness Center or other facilities within UNC Health Care, often by the same people who treated them at the clinic.

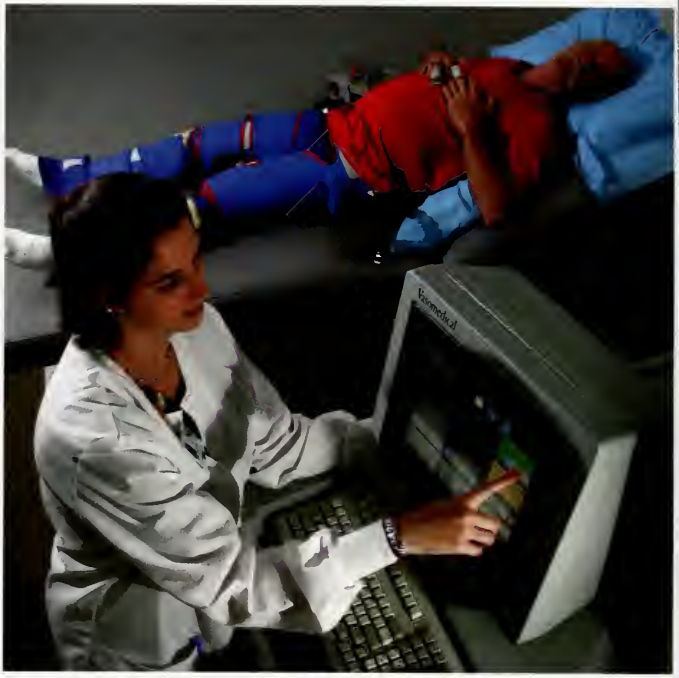
Patient care at the UNC Heart Center at Meadowmont will be directed by physicians who are faculty of the UNC School of Medicine. These faculty are recognized as leaders in cardiology in the United States, including Sidney Smith Jr., MD, a former president of the American Heart Association.

In addition, Dr. Smith and three other UNC cardiologists were recently recognized as "premier practitioners" by Business North Carolina magazine. The others were Paula Miller, MD, who heads the UNC Women's Heart program — which is the only cardiovascular health program in the Triangle geared specifically to women; Marschall Runge, MD, chair of the Department of Medicine; and Park Willis IV, MD, who specializes in the care of patients with vascular diseases.

"We will educate women on the risks of cardiovascular disease in an efficient, friendly and non-intimidating environment," Dr. Miller said. "In those women identified at risk, we will be able to evaluate and perform indicated testing on site in a timely manner."

Dr. Runge said the opening of the new clinic "will allow us to continue providing the community first-rate care for those with cardiovascular diseases in our area, and the convenience of same-day outpatient testing. This is the latest building block to be put in place in the establishment of UNC as a center of excellence in cardiovascular diseases," Dr. Runge said.

Additional information about the UNC Heart Center is available online at www.uncheartcenter.org.



April De Guzman, RN, MSN, NP, conducts an EECP treatment.

Photo by Lynn Wooten

TV spotlights a new center

To mark the opening of the UNC Heart Center, new television commercials and print advertising were unveiled recently. The TV spots were filmed in and around Wilmington and spotlight two people contemplating their lives and what the future holds — as long as they successfully avoid poor cardiac health through preventative medical help or receive the treatment they need. The print ads mirror this theme.

UNC Heart Center offers procedures in Siler City

By Rebekah Temple

The UNC Heart Center has taken cardiac catheterization on the road.

Now, people living in or around Siler City who need elective, diagnostic cardiac catheterizations can receive the procedure closer to home.

The Heart Center partnered with Chatham Hospital in Siler City to bring cardiac catheterizations to people living in the area. Every Wednesday, Mauricio Cohen, MD, assistant professor in the Division of Cardiology, travels to Siler City to perform cardiac catheterizations – a procedure in which a catheter is inserted into the heart to determine if surgery, angioplasty or stenting is needed.

Prior to July, when the first procedure was performed, people living in Siler City, Pittsboro or the surrounding area had to travel up to 50 miles to UNC Hospitals for cardiac catheterizations. Siler City is located in the center of the state, and patients are being referred from other communities such as Pittsboro and Sanford.

"Patients and their families are very happy to have more specialized cardiac services available locally in Siler City instead of having to travel long distances and navigate their way through a complex structure such as a tertiary care center," Dr. Cohen said. "At the same time, patients seen in Siler City are close enough to Chapel Hill that they can be easily transported for more complex procedures such as angioplasty or coronary bypass surgery."

The cardiac catheterizations completed at Chatham Hospital are not actually conducted inside the hospital, but in a mobile catheterization unit outside the hospital's emergency room. The Heart Center contracts with a company called MedCath to provide the cardiac catheterization laboratory, nurses and medical technicians.

"Since cardiac catheterizations are fairly complex procedures that Chatham Hospital did not have the equipment for, we decided that the easiest way to bring cardiac catheterizations to the people in the area was to use MedCath. These mobile units are state-of-the-art facilities and staffed by well-seasoned nurses and technicians," Dr. Cohen said.

Dr. Cohen and MedCath are not the only ones involved with the mobile procedures. UNC Air Care and Ground Transport Services also plays a role, traveling to Chatham Hospital for each procedure and standing by in case an emergency arises in which a patient needs to be taken to UNC Hospitals. And to ensure patients receive the same care as they would at UNC Hospitals, two Chatham Hospital nurses trained at UNC Hospitals on pre- and post-procedure care.

So far, eight procedures have been performed in Siler City. "We hope that once people learn of the service, that we will be capable of performing between eight and 16 procedures every month," Dr. Cohen said.

While balloon angioplasty and stenting can be performed during a catheterization, only diagnostic cardiac catheterizations are being performed in Siler City at this time. To receive further treatment, a patient must travel to UNC Hospitals.

In addition to making cardiac catheterizations more convenient for patients, the Heart Center also provides other cardiac services to the region. Once a week, Dr. Cohen and David Tate, MD, associate professor in the Division of Cardiology, alternate seeing patients in an outpatient clinic held at Chatham Primary Care, one of UNC Health Care's community practices.

Dr. Cohen's fluency in Spanish also is an essential asset to this initiative, which seeks to improve access and services for the fast growing Latino community in Chatham County.

The UNC Heart Center uses a mobile cardiac catheterization unit, through a company called MedCath, to perform procedures in Siler City. The company provides all equipment and personnel. Here, Mauricio Cohen, MD, left, performs his second cardiac catheterization in Siler City.

Photos by Rebekah Temple

UNC meets SARS

This summer, health care experts joined forces with university colleagues as fears mounted over a possible SARS outbreak on campus. Here's how two organizations came together when North Carolina's first case of the new disease was confirmed.

By Garry Moss

June 9 was not the typical Monday morning for Pete Reinhardt.

From the time he walked into the office until the time he left, his phone kept ringing.

As the university's director of Environment, Health and Safety, it was Reinhardt's job to keep the callers safe. And at that point, many of them were feeling anything but.

Most of the employees were either angry or scared when they called, or both. Worse, they wanted, expected, demanded answers to questions nobody had any answers to.

So what could he tell people to reassure them that everything would be all right?

Precious little. At least not yet.

Five days before, the Orange County Health Department had issued an advisory about "an Orange County man" who was suspected of having Severe Acute Respiratory Syndrome, or SARS. That was June 5. That "Orange County man" also happened to be a university contract employee who works in the Giles Horney Building on campus.

On June 9, the same day Reinhardt's phone heated up, the state released laboratory results that confirmed the employee had SARS, making him the eighth confirmed case in the United States – and the first in North Carolina.

Health care experts kick in

After the worker was diagnosed with SARS, health officials began monitoring two co-workers of his after they developed pneumonia, a key condition associated with the illness.

Reinhardt kept going through the various scenarios in his mind: Under the worst-case scenario, one or both of the so-called "secondary" cases could prove positive and that could trigger a panic among employees, neighbors and friends who had been in contact with them.

And if the situation was allowed to spin out of control, people who might have been infected could end up infecting others as they crammed into hospitals and doctor's offices seeking testing and treatment. And if that happened, Reinhardt knew, UNC could end up becoming the epicenter of a national epidemic.

In retrospect, that may sound alarmist, but as Reinhardt well knows, it's his job to be paranoid.

"I do what I call reasonable worst-case thinking," Reinhardt said. "If there had been a secondary infection, it would have been the first in the United States – and that's the beginning of an epidemic. We were really worried about that. Our employees were obviously worried about that."

> "There was tremendous internal cooperation between the university and the UNC Health Care System, at a couple of different levels."
>
> – Brian Goldstein, MD, UNC Hospitals chief of staff

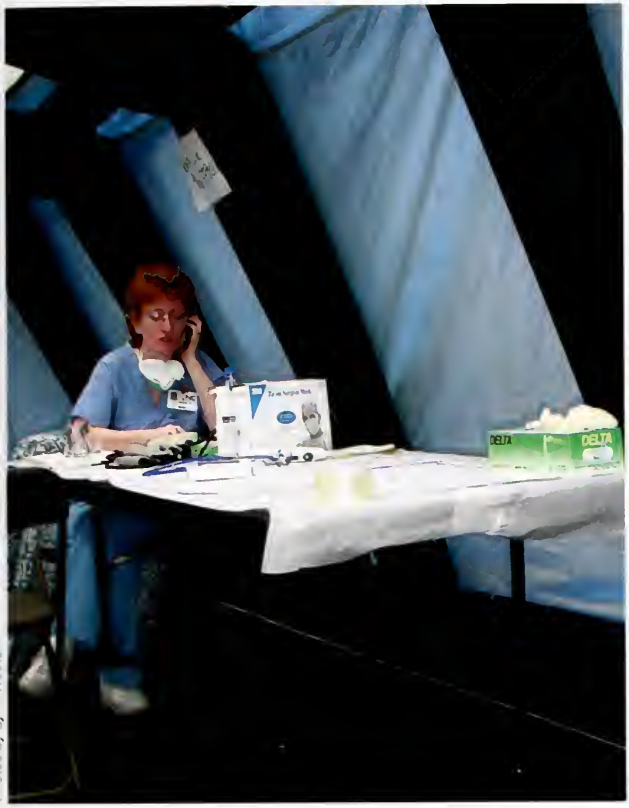
Those worried found further expression the following day, June 10, when Reinhardt and medical experts from the School of Medicine met with employees of the Giles Horney Building to listen to their concerns and answer what questions they could.

Mary Crabtree, the university's workplace safety manager for Environment, Health and Safety, remembers how emotions ran high and sometimes got hot. Some employees were angry. Others were scared. All of them wanted answers, and there were few definitive answers health experts could give them. All the most knowledgeable people could do was to be honest and tell employees that there was precious little that anyone yet knew about SARS for certain.

Meanwhile, family members of the man with SARS, along with 12 health-care workers from Wake County who treated the man on May 27 and May 30, remained under quarantine, as did three UNC Health Care workers. None of the people in quarantine developed symptoms.

The hour-to-hour, day-by-day drama would end up taking another two weeks to unfold from that Monday morning when Reinhardt's phone kept ringing.

Both the man with SARS and one of the co-workers under surveillance recovered. But the other co-worker turned gravely ill and died June 13, on the same



day preliminary tests from the Centers for Disease Control and Prevention (CDC) indicated he did not have SARS, and the cause of his death had been heart failure and pneumonia. Tests proved negative for the other man under surveillance as well. Still, the test results were only preliminary, which meant it was far too early for the university to sound the all clear.

It would not be until June 23 that the CDC announced officially the results of final tests that proved the deceased man did not have SARS.

What happened between June 5 and June 23 – and how the university and UNC Health Care responded – is more than just a dramatic story worth telling. The quick, coordinated action, both within the university and among the university and county and state health agencies, could become a national model for other universities that could be faced with similar public-health risks, including the ever-present threat of bioterrorism.

Center of the storm

Every day, it seemed, was a different stage of the crisis, with its own set of issues to resolve.

One of the most critical issues came to a head on Wednesday, June 11. The meeting involved both physicians and university administrators as well as outside public health officials. It would stretch from 4 to 8 p.m.

UNC wanted to establish a screening clinic to respond to the concerns that employees had about their vulnerability to the disease.

At the June 10 information sessions with employees, some workers had demanded that they be tested for SARS. But the CDC was already swamped with a backlog of high-risk cases. Employees at Giles Horney were not considered high-risk because they had been exposed to the man with SARS more than two weeks before and had not developed symptoms. However, 39 percent of the 184 Giles Horney employees who responded to a health questionnaire reported symptoms of fever or respiratory illness during that time period.

UNC officials knew that there were more than medical questions to consider. As an employer, the university had to address other needs and concerns connected to the SARS scare that were no less real.

Given employees' level of concern, and given the university's level of expertise, university and UNC Health Care administrators told outside officials they wanted to set up a screening clinic for employees to be tested for SARS.

Outside health officials, though, feared that establishing the screening clinic would fan the flames of fear rather than dampen them.

The idea encountered resistance until university officials could explain how they would handle the clinic, said Brian Goldstein, MD, chief of staff for UNC Hospitals.

"The concern of outsiders, I think, was that we could potentially be seen as overreacting or even panicking to the situation," Dr. Goldstein said.

Dr. Goldstein said he had three priorities at that time. The first was to provide a service to the university and community in a time of need. The second was to protect the health care system's and the university's employees and physicians. The third was to protect the clinic itself, which had to be done to achieve the other two priorities.

People who went to the hospital for testing and treatment in Toronto, for example, triggered the outbreak there.

UNC HealthLink offers expertise

That scenario was averted here, in large part, as a result of the effectiveness of UNC HealthLink, a nurse call triage service that allowed employees to talk to nurses to describe their symptoms and find out where to go if their symptoms warranted further testing or treatment. On June 10, staffing for the line was increased so that people could call in during daytime business hours.

But employees who believed they might have SARS needed a place to go to be screened – and the place that was finally picked was the park-and-ride lot on Airport Road in Chapel Hill. It was closed for the summer, and better yet, close enough to be convenient for employees working in the Giles Horney Building but far enough from the work site to avoid fueling undue concerns.

Even as these high-level meetings about the clinic were taking place, faculty and staff within the hospitals' Occupational Health Clinic had been busy testing and training employees on how to use N-95 respirators that were on stock to deal with such infectious respiratory diseases as tuberculosis. The respirators, if it came to it, could be used to protect doctors and nurses who would be called upon to care for SARS patients.

Three tents were set up: the first – Tent A – where everybody was sent; the second tent, where further screening was conducted; and the third tent, where diagnostic equipment was in place for people to be examined.

The clinic operated from 7 a.m. to 5:30 p.m. on June 13 and from about 9 a.m. to noon June 14.

In the end, the health care and university officials found the clinic to have fulfilled its intended purpose of recognizing employees' concerns and responding to them in a prompt but measured way.

David Weber, MD, professor of epidemiology in the School of Public Health and of pediatrics and medicine in the School of Medicine, said the screening site struck a balance between responding to the legitimate fears of employees without going so far so fast as to create hysteria.

More than 40 people were seen over the two days the clinic operated, Dr. Weber said. None of them were found to have SARS, but two people with unrelated medical problems were sent to the emergency room for needed treatment.

Dr. Goldstein said health care and university officials struck a delicate balance between being responsive to employees' concerns, but at the same time evaluating decisions based on sound science. That balance was illustrated both by the decision to set up the temporary clinic, he said, and the decision not to fumigate the Giles Horney Building, as some employees had demanded.

As Dr. Goldstein put it, "You have to listen and hear what people's concerns are, and you can do that and address concerns without indulging them to the point of doing more harm than good.

"It was appropriate not to fumigate the building, even as it was appropriate to screen individuals one at a time in the temporary facility."

Drawing upon varied assets

As difficult as the situation proved to be, health care experts and university administrators knew even in the midst of it that they had several factors riding in their favor.

The first thing was that UNC Health Care and the university had not been caught unprepared.

Even before the health alert, Reinhardt and his unit, along with other representatives from the UNC and Orange County Health Department, had been developing contingency plans for how the campus should respond if a SARS case was reported here. Already, officials had thought through the possibility of a faculty member returning from abroad who might have become infected, or international students – or their family members – arriving to campus for the first time in the fall.

The second thing was the expertise of the faculty and the close contacts many of them had with both state health agencies and the CDC.

There was Bill Roper, the dean of the School of Public Health, who had directed the CDC in Atlanta and kept close ties with it.

There was Ralph S. Baric, a professor of epidemiology in the School of Public Health and microbiology and immunology in the School of Medicine, who is an expert on coronaviruses – the newest of which is SARS.

There was Dr. Weber, who had helped lead preparedness efforts at UNC Hospitals, where he is a clinician and also associate director of the Statewide Program in Infection Control and Epidemiology.

There was Peter H. Gilligan, PhD, director of the Clinical Microbiology and Immunology Laboratories and professor of microbiology and immunology and pathology and laboratory medicine at the School of Medicine, who is an expert in the diagnosis of infectious diseases, including emerging infectious diseases.

There was Myron S. Cohen, MD, J. Herbert Bate professor of medicine, microbiology and immunology within the School of Medicine, chief of the Division of Infectious Diseases and director of the Center for Infectious Diseases. Cohen's research focuses on the transmission and prevention of transmission of pathogens, and he teaches courses relating to immunology, microbial pathogenesis, HIV and clinical infectious diseases.

And there was Pia MacDonald, project director

for the N.C. Center for Public Health Preparedness and a research assistant professor in the School of Public Health's Department of Epidemiology, whose expertise includes applying epidemiology to the state and local health departments and outbreak investigation and surveillance.

The third thing was the cooperation that took place both within the university and UNC Health Care and with outside public health agencies.

Hospital, university collaboration

"There was tremendous internal cooperation between the university and the UNC Health Care System, at a couple of different levels," Dr. Goldstein said. "We were cooperating at one level as members of a family and that was because the index case of SARS happened to be a contract employee of the university."

At another level, the university as a whole was part of a bigger community that included Chapel Hill and Carrboro and Orange County and the surrounding region. And as part of this bigger community, UNC cooperated with such agencies as the Orange County Health Department and the state communicable disease organization.

"I thought the cooperation was excellent at both levels," Dr. Goldstein said. "I hate to sound like a Pollyanna, but everybody – from the medical staff to the administrators of the Health Care System, from Environment, Health and Safety to university administrators – just excelled."

Crabtree agreed. "I think the biggest thing that helped us was the collaboration between the university and the hospital," Crabtree said. "We were able to pull together quickly in response to a situation that could have been an epidemic. The experience proved to be a great learning tool for all of us."

The fourth thing was the caliber of the university community itself, which would end up expressing itself in so many ways as the crisis played out.

Dr. Goldstein gives credit to the work crews from Facilities Services who set up the screening clinic in a matter of hours.

"I was extremely impressed," Dr. Goldstein said. "They deserve an incredible amount of credit and accolades for getting that going in the short time frame, and that includes folks from both the university side and the Health Care System side."

Worldwide, incidents of SARS have since dropped. That's the good news, Reinhardt said, along with the lessons learned here in response to the possibility of an outbreak.

The bad news is that SARS could end up being a seasonal illness that could reappear next year. And that is why those lessons learned could prove to be valuable – and why those lessons already are being shared with organizations nationwide.

Reinhardt knows that discussions about the SARS scare here may be theoretical. Then again, he is a worse-case thinker, and knows there is a chance SARS may re-emerge about the time most people have begun to forget about it.

"My point is that, with the many thousands of students who travel between Asia and the United States, there is at least a chance that some universities in the United States could be dealing with this problem next year," Reinhardt said. "And I'm hopeful that the lessons we've learned here could help other people."

In fact, UNC will continue to learn, too, as a new SARS task force led by Dr. Roper will make sure the campus is ready for any new developments in the illness.

Garry Moss is the managing editor of the University Gazette. *Reprinted with permission from the July 16, 2003, issue of the* University Gazette.

BAKER

Mary Lee Baker, RN, director of Ambulatory Care, received the Pittsburgh Hospital Nurses Alumnae Honorary Recognition Award at her class reunion in April 2003. Baker was honored by the alumnae for her dedication to her profession and her ability to remain calm in difficult situations. She was nominated by her sister and fellow alumna, her former colleagues in the Division of Neurosurgery, and Anthony A. Meyer, MD, PhD, professor and chair of Surgery.

BECK

Susan Beck, PhD, professor of Clinical Laboratory Science, received the Kleiner Award and the CLS Distinguished Author award for outstanding articles published in the journal, *Clinical Laboratory Science*. She was honored at the annual meeting of the American Society for Clinical Laboratory Science (ASCLS) held in Philadelphia, Pa.

Sharon Campbell, PhD, professor of Biochemistry and Biophysics, was appointed to a four-year term on the National Institutes of Health's Biophysical Chemistry Study Section.

Shannon Carson, MD, assistant professor of Pulmonary Medicine, and **Katherine Hartmann, MD, PhD**, assistant professor of obstetrics and gynecology and epidemiology, recently received the James W. Woods Junior Faculty Award. The award supports promising young members of the School of Medicine's clinical faculty early in their careers. Both Carson and Hartmann will receive $5,000 to explore new ideas, new ways of teaching students, treating patients or investigating biological problems.

Stephen Chaney, PhD, professor of Biochemistry and Biophysics, recently was the recipient of the Freshman Basic Science Teaching Award from the Whitehead Medical Society.

Myron Cohen, MD, chief of Infectious Diseases, has had his ID Pathogenesis training grant renewed. The grant is one of the oldest continuous grants funded by the NIH.

Raymond D. Cook, MD, recently joined the Division of Facial Plastic and Reconstructive Surgery as an assistant professor. Dr. Cook specializes in facial cosmetic and reconstructive surgery and reconstruction of local scars and skin cancers.

Marion E. Couch, MD, PhD, recently joined the Division of Head and Neck Oncology as an assistant professor. He specializes in head and neck surgical oncology, thyroid surgery and microvascular free tissue transfer reconstruction.

Gordon H. DeFriese, PhD, professor of Social Medicine, has been reappointed for a second four-year term as a Member-at-Large of the National Board of Medical Examiners.

Shelton Earp, MD, director of the Lineberger Comprehensive Cancer Center and Lineberger professor of medicine and pharmacology, has been appointed to a five-year term on the National Cancer Institute's Board of Scientific Advisers. The board offers input on university, institute, foundation and industry-based research, which constitutes more than 80 percent of the $4.6 billion NCI investment in public health, and clinical and laboratory research. The board also advises on scientific and program development, concept review of initiatives and policy, as well as the progress and future direction of the NCI's research programs.

Ron Falk, MD, professor and chief of Nephrology, is the principal investigator for the Renal Epidemiology Training Grant, which was recently refunded by the NIH for an additional five years.

FREID

Eugene B. Freid, MD, associate professor of Anesthesiology and Pediatrics, was selected as one of the 2003 recipients of the Presidential Citation for his contributions to the Society of Critical Care Medicine (SCCM) during 2002. The society established this award in 1995 to honor SCCM members who have made outstanding contributions to SCCM during the previous year.

Robert Gwyther, MD, MBA, professor of Family Medicine, has been named chair of the board of the North Carolina Academy of Family Physicians until December 2003.

Sandra C. Kim, MD, joined the Gastroenterology Division of Pediatrics as a research assistant professor. Dr. Kim currently has a Crohn's and Colitis Foundation of America (CCFA) grant as well as a pilot feasibility grant through the NIH-funded UNC Center for GI Biology and Disease. Her primary clinical interests are in pediatric inflammatory bowel disease.

KNISLEY

Steve Knisley, PhD, associate professor and interim chair of Biomedical Engineering,

recently received a grant for "Electro Optical Cardiac Mapping" from the American Heart Association. The grant will be funded from July 1, 2003, until June 30, 2005.

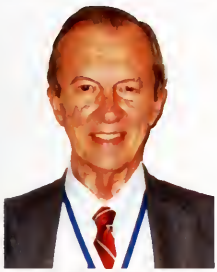
Robert W. Kyle, DO, and **Cathleen Peterson-Layne, MD, PhD**, both assistant professors of Anesthesiology, were selected to be School of Medicine Teaching Scholars during the 2002-03 academic year and have completed the program. This is an NIH grant-supported activity to which only ten faculty members per year are accepted.

Rebecca Laudicina, PhD, professor of Clinical Laboratory Science, recently received the Kendall Professional Achievement Award in Education. She was honored at the annual meeting of the American Society for Clinical Laboratory Science (ASCLS) held in Philadelphia, Pa.

Jonathan Oberlander, PhD, associate professor of Social Medicine, has published a book titled *The Political Life of Medicine*.

Christopher Pilcher, MD, assistant professor of Infectious Diseases, was selected as a recipient of the ICAAC Young Investigator Award sponsored by Merck through the American Society for Microbiology.

Arthur J. Prange Jr., MD, Boshamer Professor of Psychiatry, was honored in Pisa, Italy, recently. At its 33rd annual meeting, the International Society of Psychoneuroendocrinology presented him with a Lifetime Achievement Award, only a few of which have been bestowed to society members. Dr. Prange is known for his studies of the relationships between the nervous system and the endocrine system.



PRANGE

Austin S. Rose, MD, recently joined the Division of Pediatric Otolaryngology as an assistant professor. Dr. Rose specializes in pediatric otolaryngology, diagnostic and reconstructive airway surgery and chronic ear disease.

Brent A. Senior, MD, associate professor and chief of Rhinology/Allergy/Sinus Surgery, was named associate editor for Otolaryngology-Head and Neck Surgery, the official journal of the American Academy of Otolaryngology-Head and Neck Surgery.

Norman E. Sharpless, MD, assistant professor of Hematology/Oncology, received the Valvano Award for Cancer Research and a Beeson Award for studies on aging. He also was recently selected to receive a Sidney Kimmel Foundation for Cancer Research grant. He will receive a $200,000 grant for basic research on the regulation of tumor suppressor genes.

SHARPLESS

Sidney C. Smith Jr., MD, professor of Cardiology, was honored by the National Heart Lung and Blood Institute, National Institutes of Health, with special recognition for his work as chief science officer for the American Heart Association.

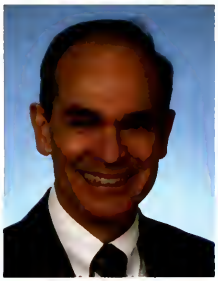
Joel E. Tepper, MD, professor and chair of Radiation Oncology, will become chair of the board of American Society for Therapeutic Radiology and Oncology (ASTRO) in October.

Karla Thompson, PhD, assistant professor of Physical Medicine and Rehabilitation, recently received the 2003 School Of Medicine Teaching Excellence Award. In order to qualify for this prestigious award, one must demonstrate competence in developing and implementing educational programs for students, invoke creative approaches to teaching and learning, instill confidence and build leadership skills and be available as a mentor for the students.

Arrel Toews, PhD, research professor of Biochemistry and Biophysics, recently was the recipient of the William C. Friday Award for Excellence in Undergraduate Teaching.

Mark Tommerdahl, PhD, director of research and assistant professor of Biomedical Engineering, recently received a grant for "Cortical Responses to Single & Multi-Site Skin Stimuli" from NIH/NINDS. The grant will be funded from May 15, 2003, until April 30, 2006.

William E. Whitehead, PhD, professor of Digestive Diseases, received the Senior Investigator in Clinical Science Award from the International Foundation for Functional Gastrointestinal Disorders.



WHITEHEAD

Frank C. Wilson, MD, Kenan Professor and emeritus chief of Orthopaedics, received the second-annual American Orthopaedic Association-Smith & Nephew Distinguished Clinician-Educator Award at the association's June meeting. The national award, presented by the association and the Smith & Nephew Co., honors outstanding contributions to orthopaedics.

John D. Wright, MD, associate professor of Ophthalmology and Pediatrics, was named as the AAO's representative to the American Registry of Pathology.

Adam Zolotor, MD, instructor in the Department of Family Medicine, was awarded the 2003 AAFP teacher development award.

WRIGHT

School of Medicine, UNC Hospitals, physicians place in new rankings

U.S. News & World Report: 'Best hospitals'

Eight medical specialties offered at UNC Hospitals rank among the top 50 programs of their kind nationwide, according to the July 28 issue of *U.S. News & World Report*.

The magazine unveiled the rankings in July for its 14th annual "America's Best Hospitals" issue.

"The UNC Hospitals have been included in the *U.S. News & World Report* rankings every year for a decade now," said Jeffrey L. Houpt, MD, dean of the School of Medicine and CEO of the UNC Health Care System. "We are very pleased that once again *U.S. News* has identified our medical center as one of the best in the United States."

To be ranked, a hospital had to meet one of three standards: be a member of the Council of Teaching Hospitals; be affiliated with a medical school; or provide at least nine of 17 specified items of medical technology. These criteria winnowed the number of "rankable" medical centers in the United States from 6,003 to 2,072.

The UNC Hospitals programs and their top-50 rankings are cancer, 24; digestive disorders, 18; ear, nose and throat, 37; geriatrics, 48; gynecology, 21; hormonal disorders, 37; kidney disease, 36; and respiratory disorders, 42.

Business North Carolina: 'Premier practitioners'

Fifty-one UNC doctors are identified as "premier practitioners" in the July 2003 issue of *Business North Carolina* magazine or the magazine's Web site.

This is the second year that *Business North Carolina* has issued top doctor rankings. The 2003 list was compiled for the magazine by Consumers' CHECKBOOK, a nonprofit research organization based in Washington, D.C. Consumers' CHECKBOOK created the list by asking physicians in the state's Charlotte, Piedmont Triad and Research Triangle metropolitan areas to recommend the specialists he or she would "consider most desirable for the care of a loved one." The doctors on the list are those recommended by the largest number of their peers.

"It is a genuine privilege to be associated with this fine group of academic physicians," said Eric Munson, president and CEO of UNC Hospitals. "The people of North Carolina are fortunate to have this cadre of professionals available to them in their times of greatest need."

The complete list compiled for *Business North Carolina* is published on the Web at businessnc.com/archives/2003/07/top_doctors.html. A smaller partial list, with some specialties omitted, is published in the magazine. The complete list includes 51 faculty of the School of Medicine. The partial list names 32 UNC faculty. All of these doctors provide patient care at UNC Hospitals in Chapel Hill or any of the 16 clinics owned and operated by the UNC Health Care System.

The UNC doctors named as "premier practitioners," listed by medical specialty, are:

Allergy/immunology – Dr. William Jay Yount
Anesthesiology – Dr. Edward Alvin Norfleet, Dr. Anthony N. Passannante, Dr. Robert David Valley
Cardiac surgery – Dr. Michael Robert Mill
Cardiology – Dr. Paula Freeman Miller, Dr. Marschall Stevens Runge, Dr. Sidney Crawley Smith Jr.
Endocrinology – Dr. John Bernard Buse, Dr. David Ainsworth Ontjes
Family practice – Dr. Warren P. Newton
Gastroenterology – Dr. Kim L. Isaacs
General surgery – Dr. Christopher C. Baker, Dr. Anthony Andrew Meyer, Dr. Mark Joseph Koruda
Hematology/oncology – Dr. Stuart Harrison Gold
Infectious disease – Dr. Myron Scott Cohen
Internal medicine – Dr. Timothy Stephen Carey, Dr. Mac Andrew Greganti
Nephrology – Dr. Ronald Jonathan Falk
Neurological surgery – Dr. Estrada Bernard
Neurology – Dr. Colin David Hall
Obstetrics/gynecology – Dr. Nancy Custer Chescheir, Dr. Valerie M. Parisi, Dr. John Francis Steege
Ophthalmology – Dr. David Keith Wallace
Orthopedics – Dr. Louis C. Almekinders, Dr. William Elwood Garrett Jr.
Otorhinolaryngology – Dr. Harold C. Pillsbury III, Dr. William Wilson Shockley, Dr. Mark Christian Weissler

Congressman visits Pittsboro dialysis
U.S. Rep. Bob Etheridge, left, visits patients at Carolina Dialysis in Pittsboro in August. He learned about the basics of end-stage renal disease. Etheridge's visit coincided with the American Nephrology Nurses's Association's first annual ESRD Education Day.

Pain medicine – Dr. William Stephen Blau
Pathology – Dr. Susan J. Maygarden
Pediatrics – Dr. Alan Davis Stiles
Plastic surgery – Dr. Damon Philip Anagnos
Psychiatry – Dr. Robert Neal Golden, Dr. Eric Webb Jensen, Dr. Byron Anthony Lindsey
Pulmonary disease – Dr. James Francis Donohue
Radiology–diagnostic – Dr. Matthew A. Mauro, Dr. Paul Lee Molina
Radiology–therapeutic – Dr. Scott Lee Sailer, Dr. Joel Elliott Tepper
Rehabilitation – Dr. Michael Young Lee, Dr. Paul Wimer Tawney, Dr. Joshua Jacob Alexander
Thoracic surgery – Dr. Frank C. Detterbeck, Dr. Thomas M. Egan
Urology – Dr. Culley C. Carson III, Dr. Stephen Francis Shaban
Vascular surgery – Dr. Blair Allen Keagy

America's Top Doctors

For the third year in a row, doctors at UNC Hospitals have made a very strong showing in a compilation of the nation's leading medical specialists.

Fifty-four UNC Hospitals physicians are listed in the third edition of *America's Top Doctors*, a book published by Castle Connolly Medical Ltd. UNC's showing placed it at No. 22 in Castle Connolly's list of the top 50 hospitals by doctor count. Last year, 51 doctors at UNC Hospitals were included and 53 were listed in the book's first edition in 2001.

Castle Connolly selected the doctors included in the book through a process that began with the mailing of surveys to more than 250,000 physicians, who were asked to nominate the top people in their specialties. The company also conducted an online survey and thousands of telephone interviews to come up with a list of about 25,000 nominees. Those doctors were asked to complete extensive biographical forms. Castle Connolly then reviewed their professional backgrounds and checked their disciplinary and license histories.

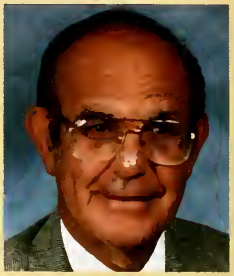
The result, according to Castle Connolly, is a "carefully researched and highly selective list of the top specialists in the nation" who are "recognized by their peers for their excellence in providing care for specific diseases and problems."

The UNC physicians, listed by medical specialty, are:

Adolescent Medicine – Dr. Carol Ford
Cardiology – Dr. Sidney Smith
Child Neurology – Dr. Robert Greenwood
Diagnostic Radiology – Dr. Etta Pisano
Endocrinology, Diabetes & Metabolism – Dr. Shelton Earp, Dr. David Ontjes
Gastroenterology – Dr. David Brenner, Dr. Douglas Drossman, Dr. Balfour Sartor
Geriatric Medicine – Dr. Mac Andrew Greganti, Dr. Laura Hanson
Gynecologic Oncology – Dr. Wesley Fowler
Infectious Disease – Dr. Myron Cohen, Dr. Frederick Sparling, Dr. Charles van der Horst
Internal Medicine – Dr. Timothy Carey
Maternal & Fetal Medicine – Dr. Nancy Chescheir, Dr. John Thorp
Medical Oncology – Dr. Mark Graham, Dr. Beverly Mitchell, Dr. Thomas Shea, Dr. Mark Socinski
Neonatal-Perinatal Medicine – Dr. Alan Stiles
Nephrology – Dr. Ronald Falk
Obstetrics & Gynecology – Dr. John Steege
Ophthalmology – Dr. Travis Meredith
Orthopaedic Surgery – Dr. William Garrett, Dr. Timothy Taft
Otolaryngology – Dr. Harold Pillsbury, Dr. Mark Weissler
Pediatrics – Dr. Melvin Levine, Dr. Jacob Lohr, Dr. Louis Underwood
Pediatric Gastroenterology – Dr. Marc Rhoads
Pediatric Otolaryngology – Dr. Amelia Drake
Pediatric Surgery – Dr. Don Nakayama (no longer at UNC)
Pulmonary Disease – Dr. James Donohue, Dr. David Henke
Radiation Oncology – Dr. Jan Halle, Dr. Julian Rosenman, Dr. Scott Sailer, Dr. Joel Tepper
Reproductive Endocrinology – Dr. Marc Fritz
Rheumatology – Dr. Nortin Hadler
Surgery – Dr. Christopher Baker, Dr. Kevin Behrns, Dr. William Cance, Dr. Mark Koruda, Dr. Anthony Meyer
Thoracic Surgery – Dr. Thomas Egan
Urology – Dr. Culley Carson, Dr. Stephen Shaban
Vascular & Interventional Radiology – Dr. Matthew Mauro
Vascular Surgery – Dr. Blair Keagy

UNC Hospitals receives favorable ACGME review for graduate medical education

UNC Hospitals has received a favorable institutional review from the Accreditation Council for Graduate Medical Education (ACGME) of its graduate medical education programs for specialty and subspecialty training.


CEFALO

UNC Hospitals is the sponsoring institution for 57 such programs. The ACGME periodically reviews each sponsoring institution to assess its commitment to graduate medical education and compliance with the ACGME's institutional policies and regulations. After UNC Hospitals submitted a 700-page institutional review document and an ACGME reviewer conducted an on-site visit, the ACGME notified UNC Hospitals this summer that it received a favorable decision. This decision will remain in effect until the next ACGME review in five years.

In addition, the ACGME commended UNC Hospitals for three "best practices" implemented in its graduate medical programs. As a result of the ACGME acknowledgment, the organization may post information about UNC's best practices on its Web site to help other institutions "improve their institutional environment."

"We are especially pleased by the commendation, because we did not submit any information for consideration under the ACGME's optional best practices review process," said Robert Cefalo, MD, who heads UNC Hospitals' Office of Graduate Medical Education and serves as the designated institutional official for ACGME review. "That means the ACGME decided on its own that these practices were worthy of praise, even though we made no special effort to call attention to them."

The ACGME is a private professional organization responsible for the accreditation of nearly 7,800 residency education programs in the United States. In addition, the ACGME conducts periodic institutional reviews of 775 sponsoring institutions. Of that number, 375 institutions – including UNC Hospitals – sponsor two or more residency programs. The ACGME conducted 86 institutional reviews in 2001, said Julie A. Jacob, ACGME's manager of communications. A favorable decision means that the sponsoring institution complies with ACGME policies and procedures that govern the educational quality of its residency programs, the work environment for residents and the quality of patient care.

The favorable review applies to UNC Hospitals programs that train a total of 641 physicians. Most of these physicians complete their residencies at UNC Hospitals, but some complete portions of their training at cooperating institutions including Carolinas Medical Center in Charlotte, The Moses H. Cone Memorial Hospital in Greensboro, Dorothea Dix Hospital and WakeMed in Raleigh and North Carolina's Office of the Chief Medical Examiner.

The ACGME notified Cefalo of its favorable decision in a letter from Cynthia A. Taradejna, executive director of the ACMGE's institutional review committee. The letter said the next institutional review site visit would likely take place in April 2008. The letter says that UNC "is commended for its extensive work done to assist programs in implementing the general competency requirements." Timetables and charts developed by UNC for this purpose "are exceptional," Taradejna wrote. The letter also commends UNC for its use of an annual resident survey, development of a chief resident leadership conference and resident excellence in clinical care awards, and extensive resident involvement on 23 institutional committees and councils.

Dr. Cefalo said UNC Hospitals' successful institutional review was due to the ongoing participation of all training program directors in adhering to program-specific training requirements. The Graduate Medical Education Committee (GMEC) at UNC Hospitals reviews each training program every two years and determines how best to assist the programs in carrying out their educational mission. The successful review was made possible by a lot of hard work from the GMEC and UNC Hospitals' Office of Graduate Medical Education under the direction of Cindi Trinidad, Dr. Cefalo said.

N.C. Jaycee Burn Center re-verified by American College of Surgeons, American Burn Association

The N.C. Jaycee Burn Center at UNC Hospitals has been re-verified as a burn center by the American College of Surgeons and the American Burn Association.

"This achievement confirms what the people of North Carolina have seen time and time again after disasters such as the Kinston explosion earlier this year and the Pope Air Force Base crash in 1994 — that the N.C. Jaycee Burn Center saves lives," said Eric Munson, president and CEO of UNC Hospitals.

Established jointly by the American College of Surgeons and the American Burn Association in 1995, the Burn Center Verification/Consultation Program for Hospitals promotes the development of burn centers in which participants provide the hospital resources necessary for optimal care of burn patients. Verified burn centers must meet criteria that ensure burn care capability and institutional performance, as outlined by the American College of Surgeons' Committee on Trauma. These criteria were developed in cooperation with the American Burn Association.

In order to receive verification, each hospital undergoes an on-site review by a team of experienced surgeons, who use the current Burn Care chapter in the ACS' "Resources for the Optimal Care of the Injured Patient" manual as a guideline in conducting the survey. The previous certificate of verification for the N.C. Jaycee Burn Center was issued in September 1998.

The N.C. Jaycee Burn Center is a 21-bed facility dedicated to providing specialized treatment and rehabilitation to severely burned patients. Since it opened in 1981, it has received national and international acclaim for its patient care, research and educational activities. It has extensive research, education, prevention and training programs. It is the only specialized burn care facility in North Carolina and the largest one between Baltimore and Augusta, Ga. Last year, the Burn Center handled more than 600 admissions and 3,500 clinic visits. More than one-third of the patients admitted were children.

Studies at the N.C. Jaycee Burn Center focus on impairment of the immune system following burn injury, the use of cultured donor skin for covering wounds, the role of nutrition in recovery and support of patients suffering severe smoke inhalation. The center's database is used nationwide to analyze results of treatment and to improve care for patients with burn injuries.

Earlier this year, the N.C. Jaycee Burn Center cared for 10 patients burned in an explosion at the West Pharmaceutical Services plant in Kinston, N.C., on Jan. 29. In previous years the N.C. Jaycee Burn Center has successfully treated large numbers of burn patients injured in disasters such a as a collision between an F-16D fighter and a C-130 transport at Pope Air Force Base in 1994, and a fire at the Imperial Foods chicken-processing plant in Hamlet, N.C. in 1991.

The American College of Surgeons is a scientific and educational association of surgeons that was founded in 1913 to raise the standards of surgical education and practice and to improve the care of the surgical patient. Longstanding achievements have placed the College in the forefront of American surgery and have made it an important advocate for all surgical patients.

The American Burn Association is a multidisciplinary not-for-profit organization first organized in 1967 to stimulate and sponsor the study and research in the treatment and prevention of burns, to provide a forum for presentation of such knowledge, to foster training opportunities for individuals interested in burns and to encourage publications pertaining to the foregoing activities.

— Tom Hughes

Longtime UNC Hospitals nursing administrator dies in July

Martha Frances "Fran" Ross of Carrboro, N.C., who retired from UNC Hospitals in December 2001 after 28 years of service, died at UNC Hospitals on July 11, 2003, after a brief illness. She was 66 years old.

At the time of her retirement, Ross, a native of Stanly County, N.C., held the title of senior vice president and director of nursing. She first joined the staff at N.C. Memorial Hospital in 1973 as vice chair of the Department of Nursing. She was promoted to chair in 1977, and remained the highest-ranking nursing officer at UNC Hospitals until her retirement. In 1981, she co-founded the Appalachian Council of Nurse Executives of University Teaching Hospitals.

Ross earned her bachelor's degree at the UNC School of Nursing in 1959 and completed course work towards a graduate degree in nursing administration in 1968. Early in her career, she worked as the nurse manager at the Veterans Administration Hospital in Durham and then joined the Duke-VA renal transplant program as a clinical nurse specialist before joining the nursing staff at UNC.

She also served as an adjunct associate professor at the UNC School of Nursing and in 1990 received the School of Nursing's Alumnus of the Year Award. In granting Ross the award, the School of Nursing credited her with being the catalyst behind a successful effort to persuade the N.C. General Assembly to pass what was described as "the most comprehensive package of legislation in the nation to address the nursing shortage." In 1991 she was honored as one of the "Great 100" nurses in North Carolina.

Fran Ross, RN

Ross is survived by an aunt, Sarah Hampton, and several first cousins. She will also be greatly missed by her many friends at UNC Hospitals, including Sandra K. Evans, who served as UNC Hospitals' assistant nursing director under Ross.

Memorial contributions may be given to the Frances Ross Memorial Scholarship Fund. Checks should be made payable to "UNC Hospitals TF 154" and sent to UNC Hospitals, Public Affairs & Marketing, c/o Susan Blalock, 101 Manning Dr., Chapel Hill, NC, 27514.

Bicycle helmet campaign aims to keep kids safe

A North Carolina law requires that everyone under age 16 must wear a helmet when riding a bicycle.

However, a quick trip through any residential neighborhood will confirm that many children on bikes are not wearing helmets, and thus are at greater risk for serious or even fatal head injuries.

To help combat this problem, UNC Health Care's Safe Communities program partnered with Chapel Hill's police and fire departments to promote helmet wearing and help keep kids safe. Any child seen riding without a helmet by Chapel Hill police officers or firefighters was given a "ticket," which was actually a voucher that could be redeemed for a free bicycle helmet at Franklin Street Cycles in Chapel Hill. The Orange County Safe Communities coalition donated 100 helmets to the campaign. Franklin Street Cycles agreed to distribute the helmets and help parents select the right helmet size for their children while supplies last.

Renu Daryani, coordinator of the Safe Communities program, said that proper bicycle safety can significantly reduce and even prevent needless injuries, disabilities and death.

"We were happy to partner with the Chapel Hill Police Department and Fire Department to better protect the kids of Orange County," Daryani said. "We hope that parents will instill safety values in their kids at an early age and this program is a positive way to enforce North Carolina's bicycle helmet law."

50s

J. Richard Patterson, MD '58, retired in January after practicing obstetrics and gynecology for 37 years in Danville, Va.

60s

Will Gibson, MD '61, was recognized in the spring by the local council of Boy Scouts as Citizen of the Year. Dr. Gibson lives in Riverside, Pa., and is retired.

Dave M. Davis, MD '63, recently traveled to France and Spain with **John Foust, MD '55**, and **Ira Hardy, MD '63**. Dr. Davis is medical director of the Piedmont Psychiatric Clinic in Atlanta, Ga.

Jim Rose, MD '64, and his wife, Sarah, now are grandparents. They live in Madison, Wis., and in addition to spending time with family, they also enjoy hiking, reading, tree farming, woodworking and volunteering.

70s

James O. Goodwin, MD '70, retired from practicing obstetrics and gynecology in December 2002. Dr. Goodwin is now vice president of medical affairs at Maria Parham Medical Center in Henderson.

William L. Isley, MD '77, was recently appointed senior associate consultant in endocrinology at the Mayo Clinic in Rochester, Minn. Prior to his appointment, Dr. Isley was the medical director of St. Luke's Lipid and Diabetes Research Center in Kansas City, Mo.

Paula Y. Smith, MD '79, is director of health services for the North Carolina Department of Correction. Dr. Smith oversees medical, dental, nursing and pharmacy services for more than 33,000 inmates in the North Carolina prison system.

80s

Kenneth Hollingsworth, MD '80, is chairman of the Department of Anesthesia at Nanticoke Memorial Hospital in Seaford, Del. Dr. Hollingsworth retired from the Navy in October 2000.

Cindy Dieringer, MD '82, was named South Carolina's 2002 Emergency Management System's Medical Control Physician of the Year. Dr. Dieringer has worked for the Kershaw County Medical Center since 1991 and has been the EMS medical director since 1997.

R. Carter Clements, MD '83, married Julia Pazzi in July 2001. Dr. Clements and his wife live in Oakland, Calif. Dr. Clements is the assistant chief of emergency medicine at Highland General Hospital, a component of Alameda County Medical Center.

Charles Saltzman, MD '85, was elected secretary-elect of the American Orthopaedic Foot and Ankle Society in June. Dr. Saltzman is a professor at the College of Biomedical Engineering at the University of Iowa.

90s

Randal Bast, MD '93, and his wife celebrated the birth of their fourth child, Rachel Elise, in May. Rachel joins Katie, Aidan and Isaac.

Nicholas B. Sliz Jr., MD '94, and his wife welcomed the birth of their second son, Alexander Reece, in May. Dr. Sliz is a pediatric cardiologist, and he and his family live in Dacula, Ga.

William T. Smith IV, MD '96, and his wife, Amy, are expecting their third child in December. Dr. Smith completed a cardiology fellowship at Duke University, and is now an electrophysiologist in Wilmington.

Sherene Shakib Min, MD '97, and her husband, John, celebrated he birth of their first child, Nicholas Joon-Hong, in May. Dr. Min recently completed an infectious disease fellowship at UNC, and in September began working at GlaxoSmithKline in clinical pharmacology discovery medicine.

Kevin J. Logel, MD '99, and wife, Kimberly, are expecting their second child in December, joining Benjamin Walker who was born in February 2002. Dr. Logel will begin a fellowship in Baltimore, Md., in August 2004.

00s

Elizabeth Rowe, MD '01, and **D. Warner Smith, MD '01**, were married in May. Dr. Rowe is a pediatrics resident and Dr. Smith is an anesthesia resident, both at the University of Utah.

Deaths

Robert W. Wilkins, CMED '31, died in April. Dr. Wilkins lived in Newburyport, Mass., and his specialty was cardiology.

Francis P. King, CMED '44, died in August. Dr. King lived in New Bern, and his specialty was internal medicine.

Arthur R. Summerlin, CMED '46, died in July. Dr. Summerlin lived in Raleigh, and his specialty was obstetrics and gynecology.

John M. Blount III, MD '60, died in June. Dr. Blount lived in Salisbury, and his specialty was general medicine.

Edgar C. Garrabrant, MD '66, died in July. Dr. Garrabrant lived in Raleigh, and his specialty was otolaryngology.

James S. Howard, MD '68, died in June. Dr. Howard lived in Fayetteville, and his specialty was surgery.

First human tests under way of HIV vaccine pioneered at UNC

The world's first human test of a vaccine against the prevalent subtype of HIV in sub-Saharan African and Asia, where millions have the virus that causes AIDS, is now under way.

The clinical trial uses novel technology pioneered by UNC scientists and the U. S. Army Medical Research Institute of Infectious Diseases.

The phase I trial began July 17 at Johns Hopkins University. An adult male, at low risk for HIV infection, was the first of 48 volunteers in the United States to be vaccinated.

JOHNSTON

Other U.S. sites include Columbia University, Vanderbilt University and the University of Rochester. Sites in South Africa are at the University of Witwatersrand, the Chris Hani Baragwanath Hospital in Soweto and the Medical Research Council in Durban.

The two-year trial will involve 48 non-HIV-infected participants in each country at four different dose levels, using a double-blind, placebo-controlled design. The primary endpoint is safety, that the vaccine does not produce significant side effects. Researchers also will look at the vaccine's ability to induce an immune response.

The vaccine is built around a disabled, safe version of Venezuelan equine encephalitis virus, or VEE. In the wild, this microbe infects horses and is sometimes carried to humans via mosquitoes.

Robert E. Johnston, PhD, professor of microbiology and immunology and director of the newly established Carolina Vaccine Institute, together with department colleague and research professor Nancy Davis, PhD, MS, studied VEE for more than 12 years, developing candidate vaccines against the virus. Their work led them to believe the virus could be modified for use as a safe vaccine vector, or delivery system for the vaccine.

Subsequent primate tests showed the technology held promise. Now, with approval from the U.S. Food and Drug Administration and the South African Medicines Control Council, a prototype HIV vaccine based on VEE technology has moved on to a human trial.

Joining Drs. Johnston and Davis in designing this "first-generation" HIV vaccine were Ronald Swanstrom, PhD, professor of biochemistry and biophysics and director of the UNC Center for AIDS Research; Jeffrey Frelinger, PhD, professor and chair of microbiology and immunology at UNC; and Drs. David Montefiore of Duke University and Phil Johnson of the Children's Hospital Research Foundation in Columbus, Ohio.

Collaborating scientists in South Africa, Drs. Carolyn Williamson, Lynn Morris and Salim Karim, also were key members of this team effort.

AlphaVax, a Durham-based biotechnology spinoff of UNC, holds the commercial license for the VEE technology from the university and contributed to the design and manufactured the trial vaccine.

"It's very rare that a basic scientist gets to see something go from a concept to an actual biological product that can be tried in human beings," Dr. Johnston said.

"The VEE vector we helped develop is a means of expressing genes – in this case we're expressing a gene in vivo – inside the person vaccinated. And those gene products then immunize the person against the disease."

The vaccine contains a copy of only a small section of genetic material from HIV and does not include genetic elements needed to reconstitute live HIV, thus precluding the possibility of causing HIV infection. The vaccine material is also designed so that its VEE components cannot generate VEE virus or cause VEE infection.

The vaccine targets cells in lymph nodes, the critical tissue of the immune system. The vector will produce the immunizing protein by expressing "gag," a major protein in the HIV particle. The protein then induces the body to respond immunologically to it.

More advanced versions of the vaccine will include expression of the HIV envelope and polymerase genes.

"We hope to refine this vaccine to the point that if an individual is subsequently exposed to HIV, they will be protected from disease," Dr. Johnston said.

"This is a good first start from the stand-

point of determining if the vector will work well. We can measure both cell mediated and humoral (antibody) immunity to gag. We'll be able to see if none or one or both arms of the immune response are activated during the vaccination."

The research collaboration of Drs. Johnson, Davis, Swanstrom, Montefiore and Johnson is working on subsequent generations of the vaccine. "We want to see if we can do better both from the delivery side and the gene side," Dr. Johnston said.

"I think I can speak for everybody on this team that we are extremely gratified to have this clinical trial opportunity. We're very hopeful. This is a major milestone."

Support for the early development of the vaccine came from the U. S. Army Research and Development Command, the National Institute of Allergy and Infectious Diseases (NIAID) and the International AIDS Vaccine Initiative. The trial is being conducted by the HIV Vaccine Trials Network, which is funded and supported by NIAID, a component of the National Institutes of Health.

UNC studies identify key genes involved in blood vessel development

New research from UNC has identified two genes that play key roles in regulating blood vessel development.

The research appeared in two reports published in the Aug. 15 issue of Molecular and Cellular Biology, a professional journal. Cam Patterson, MD, professor of medicine and director of the Carolina Cardiovascular Biology Center and a member of the UNC Lineberger Comprehensive Cancer Center, led both studies.

Both research papers focus on angiogenesis, the molecular program by which endothelial cells lining blood vessels develop or differentiate from their precursor stem cells.

PATTERSON

"I think of endothelial cells as the 'intelligent cells' of blood vessels," Dr. Patterson said. "They are communicators between the blood vessel wall and bloodstream. They are the cells that determine what a blood vessel does. For example, during angiogenesis, when new blood vessels are being formed, it's the endothelial cells that determine where they go and how big they get."

And as communicators, Dr. Patterson added, endothelial cells also help determine what passes through the blood-brain barrier, through the endothelium and into the brain, and what does not.

"One study in this issue of the journal sheds important new light on the molecular process that prevents a particular cell type from overrunning the developing embryo," Dr. Patterson said. "The findings from this study also offer tantalizing possibilities for new treatments aimed at putting the brakes on blood vessel development in tumors and other disorders having important vascular growth components, such as diabetes."

The second paper focuses on what activates the endothelial cell program, and it reports having found a possible answer in a single protein, a known transcription factor that has never been characterized functionally.

"This has really been a 'holy grail' finding for us," Dr. Patterson said. "No other research group has found a single transcription factor that by itself is both necessary and sufficient to activate the endothelial cell program."

For the first study, co-authors were Dr. Patterson and School of Medicine research colleagues Drs. Martin Moser, Olav Binder, Yaxu Wu, Julius Aitsebaomo, Rongqin Ren, Victoria Bautch and Frank L. Conlon. Dr. Christoph Bode of Freiburg University in Germany also served as co-author.

The study team discovered a gene they called BMPER for BMP-binding endothelial precursor-derived regulator. The molecule was found using "a sophisticated molecular approach to separate out endothelial cell precursors from non-endothelial cell cells in a stem-cell model," Dr. Patterson said.

In a series of experiments, the researchers demonstrated that only endothelial cells and their precursors express the BMPER gene. Endothelial cells secrete the protein as they differentiate, issuing a molecular "stop" order to inhibit further differentiation.

"This was shown very clearly when we used stem cells to generate endothelial cells and then added BMPER. We found that BMPER inhibited the whole process," Dr. Patterson said.

In the second study, Drs. Wu, Moser, Bautch and Patterson looked at the gene flk1, a molecular marker for early endothelial cell precursors. "Flk1 is important because it's a receptor for vascular endothelial growth factor, which is an angiogenic factor," Dr. Patterson said.

"But it's also important to us because it's the first gene that gets turned on in endothelial progenitor cells. So we wanted to know what transcription factors turn on flk1 and are those factors themselves sufficient enough to turn on the whole endothelial cell gene program – that is, can you use those factors to take a precursor cell and turn it into an endothelial cell?"

The study team used a screening procedure (yeast-1 hybrid screen) in which a piece of DNA was employed as a kind of bait to screen a library containing a variety of transcription factors.

"And the protein we pulled out with the bait is called HOXB5, a transcription factor that's known but that has never been functionally characterized," Dr. Patterson said.

The researchers then asked whether HOXB5 would increase expression of flk1 by binding to genetic regulatory elements in the gene.

"And indeed that was the case in our in vitro studies," Dr. Patterson said. "But the really important findings came when we over-expressed HOXB5 in stem cells. We used a stem cell model developed a few years ago here at UNC and found we could double or triple the number of flk1-positive cells that were produced from stem cells.

"But most importantly, if we look at actual vessel formation in stem cell cultures, we found vessel formation is hugely increased."

Thus, the findings indicate that simply over-expressing HOXB5 by itself not only increases expression of the regulatory protein, but also increases the number of endothelial cells that will form from the precursors.

"We're especially excited about the possibility that we can use this transcription factor to create renewable populations of endothelial cell precursors. I think this will be very important, as it would be analogous to hematopoietic (blood cell-forming) stem cells," Dr. Patterson said.

"And if we can create an analogous endothelial stem cell line, we can use that for gene therapy applications, for example, as a regenerative therapy for aged blood vessels.

"The therapeutic potentials for this research are many."

A grant from the National Heart, Lung and Blood Institute, a component of the National Institutes of Health, supported this research.

— Leslie H. Lang

Burn Center participates in study of clothing-related burns

The N.C. Jaycee Burn Center at UNC Hospitals will take part in a national study aimed at collecting data about serious clothing-related burns to children under age 15.

The new National Burn Center Reporting System project is headed by the U.S. Consumer Product Safety Commission in cooperation with about 115 burn centers nationwide, the American Burn Association, Shriners Hospitals for Children and the National Association of State Fire Marshals.

Under the new system, the N.C. Jaycee Burn Center and other burn centers that treat children will report to the commission any incidents in which a child's clothing contributed to a burn injury.

"This tool will give safety experts much needed information that was previously not available to better document the nature and cause of clothing-related burn injuries to children," said Michael Peck, MD, medical director of the N.C. Jaycee Burn Center. "We share the Consumer Product Safety Commission's goal to keep families safe from fires."

PECK

One of the N.C. Jaycee Burn Center's nurses, Ernest Grant, serves on the federal committee that is conducting this investigation. Grant also chairs the American Burn Association's Burn Prevention Committee. The Burn Center's nurse manager, Fred Price, also serves on the ABA committee.

When a participating burn center reports an incident to the Consumer Product Safety Commission, the commission assigns an investigator to the case to conduct an in-depth investigation into the circumstances surrounding the burn injury. Then the information is logged into the commission's epidemiological databases. The National Association of State Fire Marshals also is participating by retrieving and preserving for the commission children's clothing involved in burn injuries.

Hal Stratton, chairman of the Consumer Product Safety Commission, said the National Burn Center Reporting System "will give us a more complete picture of the most serious clothing-related burns to children and help us prevent or reduce burn incidents in the future."

"We're grateful for the involvement of the N.C. Jaycee Burn Center," he added.

The N.C. Jaycee Burn Center is a 21-bed facility dedicated to providing specialized treatment and rehabilitation to severely burned patients. Since it opened in 1981, it has received national and international acclaim for its patient care, research and educational activities. Earlier this year, the N.C. Jaycee Burn Center cared for 10 patients burned in an explosion at the West Pharmaceutical Services plant in Kinston, N.C., on Jan. 29. In previous years the N.C. Jaycee Burn Center has successfully treated large numbers of burn patients injured in disasters such as a collision between an F-16D fighter and a C-130 transport at Pope Air Force Base in 1994, and a fire at the Imperial Foods chicken-processing plant in Hamlet, N.C. in 1991.

The Burn Center also has extensive

research, education, prevention and training programs. It is the only specialized burn care facility in North Carolina and the largest one between Baltimore and Augusta, Ga. Last year, the Burn Center handled more than 600 admissions and 3,500 clinic visits. More than 1/3 of patients admitted were children.

Burn Center researchers focus on developing improved ways to promote healing, reduce infections and minimize scarring. In addition, the center's professional education programs boost the quality of emergency care available to burn patients at hospitals across the state. And a nationally recognized outreach effort teaches fire safety and burn prevention to schoolchildren in almost every N.C. county.

Studies at the Burn Center focus on impairment of the immune system following burn injury, the use of cultured donor skin for covering wounds, the role of nutrition in recovery and support of patients suffering severe smoke inhalation. The center's database is used nationwide to analyze results of treatment and to improve care for patients with burn injuries.

— Tom Hughes

Study points to new gene therapy tool in preventing epileptic seizures

A new study by gene therapy scientists at UNC may lead to an effective long-term treatment for preventing seizures associated with a common form of epilepsy.

The study appeared this summer in the Internet edition of the journal *Nature Medicine* and appeared in the Aug. 1 print edition of the journal. The research provides an important foundation for the development of new gene therapies to treat focal seizure disorders, the authors said.

MCCOWAN

As the name indicates, focal (or partial) seizures involve an electrical storm affecting only a part of the brain. Such seizures may remain localized or spread to other parts of the cerebral cortex.

The temporal lobes, one on each side of the head just above the ears, are the brain sites of one of the most common forms of epilepsy involving focal seizures.

"Epilepsy afflicts approximately 1 percent of the U.S. population. A large proportion of epileptic adults have temporal lobe epilepsy, which is often very difficult to treat, and for about 30 percent of those individuals the only treatment option is surgery," said study co-author Thomas J. McCown, PhD, associate professor of psychiatry in UNC's School of Medicine and a member of the UNC Gene Therapy Center.

That option is surgical resection, or removal of abnormal brain tissue at the site linked to the seizures. However, despite resection, only 50 percent to 60 percent of temporal lobe epilepsy patients improve following the surgery.

In the new research, Dr. McCown and his Gene Therapy Center colleagues Rebecca Haberman, a postdoctoral fellow, and R. Jude Samulski, PhD, center director and professor of pharmacology, used a novel strategy to make laboratory rats less sensitive to experimentally induced focal seizures.

The researchers used an altered adeno-associated virus, or AAV, to deliver into the animals' brain cells a coded sequence for the production of galanin, a neuroactive peptide known to suppress seizure activity.

In earlier studies, Dr. McCown and his team learned there would be no attenuation of seizure activity if galanin was produced within neurons and wasn't secreted from the cells. In addition, brain cells would die following induced seizures. Moreover, these cells were in a brain area intimately involved in temporal lobe epilepsy, Dr. McCown said.

In the new research, the cargo delivered via AAV included coded instructions for galanin and a secretory sequence that caused the galanin to be non-specifically secreted from the cell. In one experiment, sensitivity to focal seizure was reduced significantly. In another model seizure experiment, the AAV "construct" was delivered to only one side of the brain. Cell death after seizure induction occurred only in the untreated area.

"The treated side looked normal," Dr. McCown said. "This suggests that we can secrete an active peptide in a brain structure that's closely tied to temporal lobe seizures."

Gene expression following delivery the AAV construct can be turned off by the antibiotic doxycycline, which Dr. McCown said was an important feature of the research. "Whether it be via an antimicrobial compound or an analog, this is an absolutely crucial component to human gene therapy. You have to be able to turn gene expression off."

In terms of focal seizure control through gene therapy, the new study brings researchers a step closer to resolving a major issue: how to influence only a specific area of the brain. "In the case of seizures, the area is much more restrictive than that of a single-gene disorder where you need to hit most of the cells in a large proportion of the brain," Dr. McCown said.

Further laboratory studies with this new gene therapy platform may prove promising for treatment of temporal lobe epilepsy patients who are slated for surgery, Dr. McCown said. "You could put in this AAV vector prior to surgery and then see what effect it has on the tissue to be removed. If it controls seizure activity, you might have to reconsider resection."

The National Institute of Neurological Disorders and Stroke, a component of the National Institutes of Health, supported this research.

— Leslie H. Lang

N.C. Children's Promise radiothon set for Nov. 20

Mark your calendars! The second annual North Carolina Children's Promise radiothon to benefit the North Carolina Children's Hospital will take place Nov. 20.

Through the generosity of Raleigh-based Curtis Media Group, broadcasters from about a dozen radio stations from across the central part of the state will convene in the lobby of the Children's Hospital and ask listeners to contribute $20. This concept proved successful last year when the first radiothon brought in about $200,000.

STILES

"What makes the North Carolina Children's Promise so unique is it raises money for programs and services for the patients of the North Carolina Children's Hospital," said Alan Stiles, MD, chair of the Department of Pediatrics. "Our patients have long been receiving the best care medically possible. The radiothon has allowed us to expand and introduce new programs that will keep us on the cutting edge of medical care for children while providing this care in a family-focused and child-friendly environment."

A planned highlight of this year's 20-hour event is a concert by Grammy Award-winning music sensation LeAnn Rimes in the Children's Hospital lobby.

People who would like to contribute to the radiothon may do so by calling (866) 9-NCKIDS (866-962-5437) or by going online to www.ncchildrenspromise.org.

15th annual Carolina Kid's Classic announces record success

The 15th annual Carolina Kid's Classic was held on June 19 at Finley Golf Course in Chapel Hill. To date, over $1.5 million has been raised for the three beneficiaries, which include the North Carolina Children's Hospital, the Ronald McDonald House of Chapel Hill and The Childhood Trust.

Honorary Chair Dean Smith helped co-chairs Woody Durham and Mike Haley announce this year's record contribution of $178,000.

Thirty-two golfers began with a shotgun start under ominous skies at noon. By 3:30 p.m., play had to be cancelled due to severe thunderstorms. Despite the abbreviated play, sponsors and players were treated to refreshments and received prizes and awards.

Montross Basketball Camp raises nearly $70,000 for Children's Hospital

The ninth annual Eric Montross Father's Day Basketball Camp was held during Father's Day weekend and raised nearly $70,000 for the North Carolina Children's Hospital.

Bill Canata, a retired Pfizer executive, and his wife, Martha, served as honorary hosts of this year's event, which was attended by a record 136 children and their dads.

Camp highlights included skills training and games on the floor of the Dean E. Smith Center with Eric Montross and many former and current UNC Basketball players. A surprise for the fathers was a visit by newly appointed UNC men's basketball coach Roy Williams.

Proceeds from past Montross camps have provided the Jason Clark Teen Room and Activities Center, the children's inpatient dialysis center and many artistic murals throughout the hospital. Future programs for support are being identified.

Reservations already are being accepted for the 2004 camp and may be made by calling The Medical Foundation of North Carolina, Inc., at (919) 966-1201.

From left, Drs. Jennette, Grisham, Fordham, Bondurant and Houpt at event honoring Dr. Grisham.

Reception recognizes Dr. Grisham and funds raised for professorship

A reception to celebrate and honor Joseph Wheeler Grisham, MD, and his 30-year career with the UNC Department of Pathology and Laboratory Medicine was held in June. About 200 of Dr. Grisham's students, former trainees and staff gathered to recognize his contributions.

Also recognized were the funds raised for the Joseph Wheeler Grisham Professorship in Pathology and Laboratory Medicine. The committee which spearheaded this effort was comprised of Drs. John D. Benson, co-chair, James L. Maynard, co-chair, E. Earl Jenkins, co-chair, H. Wallace Baird, J. Ronald Edwards, Jane E. Lysko, F. Walton Avery and J. Charles Jennette, ad-hoc member.

Five companies and more than 85 individuals have donated to this professorship raising a total of $693,000. LabCorp gave $150,000 and Corporate Express gave $75,000, the largest corporate gifts received. Since this professorship raised $666,000 (and more) it qualifies for state matching funds totaling $333,000, which will bring the total value to over $1 million.

"We are delighted to be the lead corporate donor to the Grisham Professorship," said Thomas P. Mac Mahon, chairman and chief executive officer of LabCorp. "Support of this professorship is directly aligned with our strategy to provide continued access to the latest innovations in medical and laboratory science for the benefit of physicians and their patients."

"Corporate Express is proud to be part of the University of North Carolina family. The university has a long and proud tradition of excellence that Joe Wheeler Grisham embodies. We appreciate the opportunity to contribute to recognition of the life's work of a great representative of UNC-Chapel Hill," said Ed Bonner, division president of Corporate Express.

UNC officials expressed their appreciation.

"This very generous gift from LabCorp exemplifies the mutually beneficial relationship that can exist between the University and private industry," said Charles Jennette, MD, Brinkhous Distinguished Professor and chair of the Department of Pathology and Laboratory Medicine.

Dr. Grisham's vision and leadership helped unify all aspects of laboratory medicine under the professional direction of the department, dramatically increased research accomplishments, expanded the graduate education opportunities and strengthened the residency training program in pathology. The fund will be a lasting legacy that will help ensure that the department continues to maintain the excellence from which all current and former faculty and trainees have benefited.

Dr. Grisham was chair of the Department of Pathology and Laboratory Medicine from 1973 to 1999. Afterward, he remained a fulltime faculty member and was Kenan Professor of Pathology and Laboratory Medicine until last July.

To make a donation to the Grisham fund, call The Medical Foundation of North Carolina, Inc., at (919) 966-1201 or (800) 962-2543.

— Mary Ollila,
The Medical Foundation of NC, Inc.

Program on Aging receives $2 million Donald Reynolds Grant

UNC's Program on Aging received a four-year, $2 million grant that will significantly strengthen the care of older adults across North Carolina.

"With this grant support, we will ensure that every graduate of the medical school receives the skills necessary for quality care for older patients. It is important that these students know how to deal with the complex problems of the elderly population, because the older population represents well over half of all physician visits each year," said Jan Busby-Whitehead, MD, the program's director and principal investigator of the grant.

In 90 percent of the nation's medical schools, students can graduate with no formal training in caring for older adults.

Most geriatrics programs that do exist greatly lack the financial support, faculty and research necessary for expansion.

This initiative, funded by the Donald W. Reynolds Foundation, will greatly enhance geriatrics content for every medical student at the university. Through realistic case scenarios, medical students will learn to use the latest geriatrics evidence to inform decisions on patient care. The initiative will also increase the number of training opportunities for students through geriatric clinical rotations. Beginning in 2007, all medical students will complete at least one clinical rotation in geriatric medicine.

In addition to medical student training, faculty will collaborate to develop a comprehensive core curriculum in geriatrics for 116 residents annually in internal and family medicine. "This grant will enable us to develop a focused and standardized geriatrics curriculum to train for residents," said Debra Bynum, MD, assistant professor in the Division of Geriatric Medicine. "This will add a necessary dimension to residency training and will ensure quality health care delivery in the future."

In North Carolina, the number of adults 65 and older is expected to reach more than 2 million by 2030, leaving the state scarcely prepared to deal with the health needs of this segment of the population. For each 6,282 older patients in the state, there is only one geriatrician. Of the 650,000 physicians practicing in the nation, less than 9,000 are certified in geriatrics.

The Program on Aging will increase the number of faculty, fellows, residents, researchers and preceptors who have the level of expertise to train additional physicians, reaching a minimum of 132 physicians each year. "Our goal is to build on this institution's capacity to prepare future physicians for leadership in geriatrics, while also expanding this training to include physicians across North Carolina. We really want to guarantee that physicians in the entire state are able and ready to care for older patients," Dr. Busby-Whitehead said. "With the aging population growing at a rapid rate, the state must be prepared to address the needs of this population."

Throughout the initiative, the program will train physician-leaders to conduct educational outreach to community physicians across the state. "North Carolina's health care providers need to be continually updated with the latest information on the care of the elderly. Through this collaboration, we will be able to offer continuing education and other information resources to the widest possible audience," said Thomas Bacon, DrPH, director of the North Carolina Area Health Education Center (AHEC) Program.

The initiative, which began Sept. 1, will draw on the collaborative strengths of the Program on Aging, UNC Hospitals, the North Carolina AHEC Program, and the UNC departments of Medicine, Family Medicine, Neurology, Obstetrics/Gynecology and Psychiatry.

The Donald W. Reynolds Foundation is a national philanthropic organization founded in 1954 by the late media entrepreneur for whom it is named. Headquartered in Las Vegas, it is one of the 50 largest private foundations in the United States.

"We are indebted to the Reynolds Foundation for this award," said Cheryl McCartney, MD, executive associate dean for Education. "It will give medical students access to a specialized curriculum that will include every aspect of training in geriatric care."

— UNC News Services

A berry nice gift

When you think of blueberries, it's usually "pie" or "cobbler" that come to mind. But to UNC women's basketball coach Sylvia Hatchell, it's cancer research.

Hatchell, who had a cancer scare in 2000, has given a gift each year to UNC Lineberger Comprehensive Cancer Center, usually matching season tickets sales to UNC women's basketball games.

This year, she is giving profits from her blueberry picking patch on her mountain property near Black Mountain. The pick-your-own sign states that all proceeds go to Lineberger and gives an address where checks are to be mailed.

"This is just a small way to give back," Hatchell said, "and get other people involved with the cancer center. Plus, since it is a 'pick your own' patch, I figure more berries will be bought if they know the money goes for cancer research."

"What a healthy combination," said Marci Campbell, MD, associate professor of nutrition at the UNC School of Public Health and leader of the cancer prevention and control program at UNC Lineberger. "You get exercise from picking the blueberries and outstanding nutritional value from eating them."

Blueberries are one of the richest fruits in antioxidants that are believed to help prevent cancer. The blue and red color in blueberries comes from a class of antioxidants called flavenoids – specifically, anthycoanin and proanthocyanin compounds. These antioxidants are even more powerful than Vitamin C. Not only that, studies suggest that blueberries may improve short term memory.

Jack Kirstein of Marion knows the blueberry patch well. It is located on land once owned by his family and sold to Hatchell. Kirstein mows and prunes the bushes each year. He and his wife, Margaret, also pick berries for canning, pies and to add to cereal.

Kirstein, a retired school principal and science teacher, is a cancer patient himself. He was diagnosed in 1996 with prostate cancer and is currently under treatment at Lineberger.

"I tell people that it's a good feeling to get the berries – they're good for you – and that it's good to be contributing to a cancer research center that's trying to help us all."

Shelton Earp, MD, Lineberger director, said, "We continue to be grateful to Coach Hatchell for her involvement with and support of the cancer center. An event that combines raising money for cancer research with beneficial exercise and healthy eating is the best."

– Dianne Shaw,
UNC Lineberger Comprehensive Cancer Center

Cheesecake Factory event benefits N.C. Children's Hospital

On August 16, 750 people attended the Cheesecake Factory's "Very Grand Opening" celebration at Crabtree Valley Mall in Raleigh. The Cheesecake Factory and the Carolina Hurricanes Kids 'N Community Foundation chose the North Carolina Children's Hospital as the beneficiary of the event. Patrons enjoyed cocktails, appetizers, a grand buffet, live music and, of course, cheesecake. All proceeds – $23,000 – from ticket sales were donated and benefit the children's heart program and other programs in need at the hospital.

Physical therapy alumna gives back to school

An alumna recently made a donation to help further enhance the School of Medicine's Physical Therapy program.

Lorene Poole Gruzdis, who graduated from the Physical Therapy program as an undergraduate in 1963, made the donation earlier this year. The funds will not be available until June 2004, but faculty members in the Division of Physical Therapy have a number of exciting educational projects to be funded.

Gruzdis' donation will help support educational programs, benefiting students in both the Master of Physical Therapy and Doctor of Physical Therapy programs, said Darlene Sekerak, PT, PhD, director of the Division of Physical Therapy. "Such donations are essential for us to maintain the excellence expected of nationally ranked education programs," she said. "We appreciate this generous contribution."

Because she was fortunate enough to receive scholarships as a student, Gruzdis said she felt the need to give back to the school. "I was privileged to have a tuition scholarship for all four years at Carolina and to hold a part-time job during my first two years," Gruzdis said. "I also received an additional scholarship from the P. T. School for my last two years."

After graduating from UNC, Gruzdis worked in several Physical Therapy positions. She then went on to receive a graduate degree in Public Administration with a health track specialty from the University of Colorado in 1981. Gruzdis credits her success to the education she received at UNC. "My professional credentials were established by my education at the University of North Carolina, specifically the program in Physical Therapy." She added, "I moved into other positions, unrelated to health care, but the principles established during those Carolina years held true."

Roberts Trust gives $100,000

The North Carolina Children's Hospital received $100,000 from the Pauline L. Roberts Charitable Trust. These funds were provided to dedicate an endowment named the Pauline and Linwood Roberts Fund. The proceeds will support the Neonatal Intensive Care and Pediatric Intensive Care Units. The children cared for in these areas are among the most seriously and critically ill.

Excellence Fund thanks 2002-03 donors

The Excellence Fund is the annual unrestricted giving program for friends of UNC Medicine who are not alumni of the Medical School. Each year parents, former patients, corporations, foundations and other friends make a difference through their Excellence Fund gifts. Because these gifts are unrestricted, they go where needed most to help programs at UNC Medicine.

Scholarships for disadvantaged students, seed grants for promising scientific research, and funds for clinics to provide health care to some of our neediest citizens — these are just a few of the programs benefiting from donations to the Medical Foundation Excellence Fund each year.

The following donor list includes all contributions to the Excellence Fund between July 1, 2002, and June 30, 2003. Pledges are not included. Every effort for accuracy has been made; however, if you have a correction please contact Shana Odle at (800) 962-2543 or Shana_Odle@unc.edu.

Thank you for your generosity and support. Your gifts help provide the resources needed for UNC Medicine to excel in patient care, research and education.

The Excellence Fund 2002-2003 Donor Honor Roll

A
Dr. and Mrs. Murray S. Abrams, Greensboro, NC
The Advisory Group, Raleigh, NC
Mr. and Mrs. James H. Anderson, Chapel Hill, NC
Mr. and Mrs. Thomas E. Archie, Sr., Washington, NC
Mr. and Mrs. Melvin Asbury, Raleigh, NC
Mr. Robert R. Athari, Charlotte, NC
Dr. and Mrs. William S. Atkins, Boone, NC

B
Bailey Endowment, Inc., Shelby, NC*
Ms. Sharon W. Baker, Tampa, FL
Mr. and Mrs. Joseph E. Banecker, Plymouth Meeting, PA
Mrs. Sterling Barrett, Waterloo, IA*
Mr. Charles H. Barrier, Jr., Greenville, NC
Ms. Jean M. Bartholomew and Mr. Harvey C. Lanier, Mebane, NC
Dr. Linda S. Bartram, Bremerton, WA
Dr. and Mrs. John H. Bauman, Chapel Hill, NC
Mr. John W. Becton and Ms. Nancy B. Tannenbaum, Chapel Hill, NC
Mr. and Mrs. Robert F. Bell, Sr., Ridgeway, VA
Mr. and Mrs. Charles G. Bennett, Jr., Reidsville, NC
Mr. and Mrs. Sanford V. Berg, Gainesville, FL
The Bernard Foundation, High Point, NC*
Drs. Danilo R. and Imelda Bernardo, Roanoke Rapids, NC
Dr. and Mrs. Raja G. Bhat, Wilmington, NC
Dr. Dorothy M. Blasco, Fort Lauderdale, FL
Mr. David C. and Dr. Linda B. Bloom, Gainesville, FL
Ms. Lois E. Blue, Thomasville, NC
Ms. Lillian R. Boney, Rocky Mount, NC
Mr. J. Richard Bowen, Wilmington, DE
Mr. James M. Boyette, Jr., Raleigh, NC
Dr. William V. Bradshaw, Fort Worth, TX
Mr. and Mrs. James Brame, Jr., Durham, NC*
Ms. C. Jean Breckenridge, Chapel Hill, NC
Mrs. Frances F. Brinkley, Durham, NC*
Mr. and Mrs. Brian Brown, Raleigh, NC
Mr. and Mrs. Glenn Brown, Northville, MI
Mr. Joseph M. Bryan, Jr., Greensboro, NC*
Mr. and Mrs. James P. Buckley, Chapel Hill, NC
Dr. and Mrs. Paul L. Bunce, Chapel Hill, NC
Ms. Amelia P. Burke, Chapel Hill, NC
Mr. D. Randolph Burks III, Charlotte, NC
Mr. Samuel M. Byrd, Lillington, NC

C
Daniel D. & Elizabeth H. Cameron Foundation, Wilmington, NC*
Ms. Sylvia G. Camp, Jupiter, FL
Mr. and Mrs. Bruce D. Carlton, Wilson, NC
Mr. and Mrs. Barr T. Carris, Beaufort, NC
Mr. and Mrs. Ervin M. Carroll, Jr., Four Oaks, NC
Carstarphen Family Foundation, Inc., McAdenville, NC*
Carter Foundation, Inc., Greensboro, NC*
Mr. John Caruso, Wayland, MA
Mr. and Mrs. George H. V. Cecil, Asheville, NC
Mr. and Mrs. Allan W. Cha, Cary, NC
Mr. Chris Chapman and Ms. Mary Beth Blackwell-Chapman, Lewisville, NC*
Dr. and Mrs. Stephen V. Chiavetta, Raleigh, NC*
Mr. and Mrs. Jean Chu, Raleigh, NC*
Dr. and Mrs. Joseph Y. Chung, Marion, NC
Mr. and Mrs. Arthur W. Clark, Durham, NC
Ms. Rosalind A. Colley, Barrington, RI
Ms. Judith D. Cook, Raleigh, NC
Mr. and Mrs. James L. Copeland, Chapel Hill, NC*
Mr. and Mrs. James R. Copland III, Burlington, NC
Mr. and Mrs. John Covert, Saline, MI
Mr. and Mrs. E. B. Crawford, Jr., Wilmington, DE
Mr. and Mrs. John B. Crudup, Wilson NC
Mr. and Mrs. J. Slade Crumpton, Sr., Durham, NC*
Mr. and Mrs. Peter Cullen, Winston-Salem, NC
Dr. Sidney S. Curry, Norcross, GA

D
Dr. and Mrs. G. Albert Dasher, Charlotte, NC*
Mr. and Mrs. Earnest M. Davis, Enfield, NC
Ms. Stephanie D. Davis, Apex, NC
Mr. Arthur S. DeBerry, Chapel Hill, NC*
Dr. and Mrs. Michael E. Derieg, Kailua Kona, HI*
Dr. S. Jay Desilva, Davidson, NC
Mr. and Mrs. David Lee DeVries, Greensboro, NC
The Dickson Foundation, Charlotte, NC*
Mr. and Mrs. William T. Dillon, New Bern, NC
Ms. Eileen M. Doering, Philadelphia, PA
Mr. and Mrs. Edwin H. Dunlap, Durham, NC

E
Ms. Susan Ehringhaus, Chapel Hill, NC*
Mr. and Mrs. William E. Elmore, Jr., Greensboro, NC
Mr. and Mrs. William L. Ely, Rochester, NY*
Mr. and Mrs. John W. C. Entwistle, Jr., Charlotte, NC
Mrs. Ruth Ann D. and Mr. Robert F. Ethridge, Greenville, NC

F
Mr. and Mrs. J. Edward Faulkner, Jr., Greensboro, NC*
Mrs. Ruth H. Feaster, Lake Toxaway, NC
Dr. Anne C. Fischer, Baltimore, MD
Fleshman-Pratt Foundation, Inc., Winston-Salem, NC*
Mr. Wiley Dew Forbes, Jr., Beaufort, NC
Mr. and Mrs. Charles G. Foskey, Chapel Hill, NC*
Dr. and Mrs. J. Lawrence Frank, Durham, NC
Ms. Grace V. Frankstone, Columbia, SC
Dr. and Mrs. William Freccia, Fayetteville, NC
Mr. Peter N. French, Lansing, NY

G
Galaxy Cleaners, Cary, NC
Ms. Caroline Gamble, Winston-Salem, NC
Mr. and Mrs. William C. Gay, Greensboro, NC
Mr. W. Farley Gilliam, Jr., Stilwell, KS
Ms. Michele Gilligan and Mr. Lester Ettlinger, Baltimore, MD
Mr. and Mrs. Michael Goloboy, Chapel Hill, NC*
Mr. and Mrs. John H. Goodman, San Diego, CA
Mr. and Mrs. Thomas A. Gorman, Allentown, PA
Dr. and Mrs. Steven H. Grossman, Chapel Hill, NC*
Dr. and Mrs. Chris W. Guest, Greensboro, NC

H
Mr. James G. Hall, Jr., Dobson, NC
Mrs. Faith E. Hamlin, Lexington, NC
Dr. W. C. Hargrove III, Haverford, PA
Mr. and Mrs. E. Jackson Harrington, Jr., Greensboro, NC
Mrs. Virginia E. Hester, Sanford, NC*
Mr. and Mrs. Joseph Hoban, Havertown, PA
Col. Richard P. Hobbs, Jr., Havelock, NC
Mr. and Mrs. A.L. Hobgood III, Raleigh, NC*
Mrs. Alfred L. Hobgood, Jr., Smithfield, NC*
Mrs. Adelaide F. Holderness, Greensboro, NC*
Mr. and Mrs. Richard T. Holderness, Greensboro, NC*
Mr. and Mrs. Dale Hollingshead, North Andover, MA
Mrs. Bernice B. Holshouser, Chapel Hill, NC
Dr. and Mrs. Ole R. Holsti, Chapel Hill, NC*
Mr. and Mrs. James W. Hooker, Durham, NC

Mr. and Mrs. Thomas G. Hopkins, Waxhaw, NC
The Homer Company, Charlotte, NC
Mr. and Mrs. Daniel Howard, Pink Hill, NC
Mr. and Mrs. Kenneth H. Howes, Charlotte, NC
Ms. Lucia W. Hudson, Chapel Hill, NC
Dr. and Mrs. William D. Huffines, Chapel Hill, NC
Ms. Christine R. Huffman, Farmington, UT
Mr. and Mrs. Chapman C. Hutchinson, Conway, SC

J
Mr. and Mrs. Charles Jackson, Clinton, NC
Mr. Freeman R. Jackson, Jr., Summerfield, NC
Dr. and Mrs. Eric W. Jensen, Chapel Hill, NC
Mr. David B. Johnson, Mount Airy, NC
Mr. Daniel I. Jones, Smithfield, NC
Ms. Deborah A. Jones-Combs, Knightdale, NC

K
Dr. and Mrs. William Keenan, St. Louis, MO
Mr. and Mrs. David C. Keesler, Charlotte, NC
Mr. and Mrs. James Arthur King, Raleigh, NC*
Mr. Kevin Kondrad and Mrs. Eileen Curran-Kondrad, New Hampton, NH
Mr. Arun Krishnaraj, Carrboro, NC
Ms. Maria Kucirka, Kernersville, NC

L
Ms. Neeli C. Lambert, Oakland, MD
Dr. and Mrs. Ward Lambeth, Summerfield, NC
Mr. Charles N. Landen, Sr., New Bern, NC*
Mr. and Mrs. John M. Latimer, Chapel Hill, NC*
Dr. and Mrs. John E. Lawrence, Asheville, NC
Mrs. Lillian A. Leath, High Point, NC*
Mr. and Mrs. Larry Ledford, Valdese, NC
Ms. Anne T. Lee, Washington, DC
Dr. Barbara M. Lennon, Asheboro, NC
Mrs. Dorothy F. Leonard, Turkey, NC
Mr. and Mrs. Ken Liberatore, Nashville, TN
Mr. J. Randall Lindley, Raleigh, NC
Mr. and Mrs. Tony Lingle, Lenoir, NC
Mr. and Mrs. Edwin A. Link, Matthews, NC
Dr. and Mrs. Howard M. Listwa, Allentown, PA
Mr. and Mrs. William N. Luthin, Durham, NC

M
Mr. William S. Maceyko, San Diego, CA
Dr. Sarah D. Maddison, Raleigh, NC
Ms. Margaret R. Malburg, Greensboro, NC
Ms. Myra Malis, Philadelphia, PA
Mr. Lonnie W. Mangum, Jr., Burlington, NC
Ms. Ingeborg K. Margrey, Alpharetta, GA
Ms. Agnes F. Marshall, Raleigh, NC
Ms. Elizabeth E. Marslender, Arlington, VA
Dr. and Mrs. David A. Martin, Raleigh, NC
Mrs. Jill B. Mayer, Chapel Hill, NC
Mr. and Mrs. F. Michael McCall, Charlotte, NC
Ms. Jean L. McCloskey, Atlanta, GA
Dr. and Mrs. Michael E. McCrory, Chapel Hill, NC
Mr. Frank B. McLaurin, Jr., Milledgeville, GA
Mr. and Mrs. William S. McLean, Lumberton, NC
Dr. Julia A. McMillan, Baltimore, MD
Mr. and Mrs. Leonard C. Meeker, Ocracoke, NC
Dr. Frederick J. Michel, Lexington, KY*
Mr. and Mrs. Hal M. Miller, Raleigh, NC
Mr. and Mrs. John F. Mitchell, Raleigh, NC
Dr. and Mrs. Jeffrey G. Mokris, Charlotte, NC
Mr. Robert A. Moore, Chapel Hill, NC
Mr. and Mrs. Patrick J. Mulcrone, Charlotte, NC*
Mrs. Jean S. Murphy, Naples, NC
Ms. Ruth J. Murphy, Kinston, NC
Dr. and Mrs. Thomas L. Murphy, Jr., Gastonia, NC
Mr. and Mrs. Brian P. Myers, Winston-Salem, NC

N
Dr. and Mrs. Carl W. Nash, Eden, NC*
Ms. Laurie Jane Norman, Carrboro, NC
Mr. and Mrs. Stephen P. Norman, Rye, NY
Mr. and Mrs. Charles S. Norwood, Jr., Goldsboro, NC*
Dr. and Mrs. James A. Nunley, M.D., Durham, NC*

O
Mr. and Mrs. Vic A. O'Neal, Burlington, NC
Ms. Shana Hamilton Odle, Cary, NC

P
Mr. and Mrs. James R. Palermo, Charlotte, NC*
Mrs. Ruth M. Paul, Mount Dora, FL
Mr. and Mrs. Richard L. Pearson, Birmingham, AL
Mr. and Mrs. Billy R. Pegram, Oak Ridge, NC
Mr. and Mrs. Thomas L. Phelps, Raleigh, NC
Mr. Herman G. Phillips, Jr., Winnsboro, SC
Philpott Foundation, Inc., Lexington, NC*
Mrs. Grace S. Philpott, Lexington, NC*
Mr. and Mrs. Geoffrey A. Planer, Gastonia, NC
Ms. Evelyn B. Pollard, Chapel Hill, NC
Mr. and Mrs. Charles L. Powell, Chapel Hill, NC*
Ms. Mary Lou Prieto, Chapel Hill, NC
Mrs. Linda W. Primm, Denver, NC
Dr. and Mrs. William I. Procter, Raleigh, NC
Dr. and Mrs. James E. Pugh, Charlotte, NC

R
Mr. and Mrs. Richard S. Rachlin, North Palm Beach, FL
Mrs. William E. Ragsdale, Jamestown, NC*
Mr. Zeno O. Ratcliff III, Pantego, NC
Mr. and Mrs. Johnnie Robertson, Mooresville, NC
Ms. Barbara Rogers, Greensboro, NC
Mr. and Mrs. Lawrence C. Ross, Greensboro, NC
Retired Colonel and Mrs. A. W. Ruete, Jr., Jacksonville, NC

S
Dr. and Mrs. Robert Schafermeyer, Charlotte, NC
Mr. and Mrs. Frank G. Schafstedde, Raleigh, NC*
Mr. and Mrs. Dodson R. Schenck, Jr., Greensboro, NC
Mr. and Mrs. Paul W. Schenck, Jr., Greensboro, NC
Dr. and Mrs. John T. Sessions, Chapel Hill, NC
Mr. Arun and Dr. Kanchan Shimpi, Rockville, MD
Mr. and Mrs. Stephen E. Simmons, Columbia, SC
Dr. and Mrs. Fred G. Smith, Jr., Chapel Hill, NC
Mr. McNeill Smith, Greensboro, NC
Mrs. Clarence C. Smitherman, Signal Mountain, TN*
Ms. Gayle M. Smith-Neely, Summerfield, NC
Ms. Stephanie C. and Mr. Gary L. Stadler, Chapel Hill, NC
Mr. and Mrs. Gerald J. Stanig, Bernardsville, NJ
Mr. and Mrs. Jasper G. Stern, Wilson, NC
Mr. and Mrs. Paul Stessel, Chapel Hill, NC
Dr. and Mrs. Robert T. Stone, Wilson, NC
Mr. and Mrs. Simon P. Stone, Jr., Madison, NC
Mr. and Mrs. Keith M. Stroud, Charlotte, NC
Mr. and Mrs. Harry H. Summerlin, Jr., Asheville, NC

T
Dr. and Mrs. David T. Tayloe, Sr., Washington, NC
Mr. and Mrs. Paul Tedrow, Lexington, MA
Dr. and Mrs. Stanley N. Tennant, Greensboro, NC*
Ms. Deanna L. Thompson, Charlotte, NC
Mr. and Mrs. Wallace F. Tillman, Washington, DC*
Mr. and Mrs. Jaime E. Trujillo, Clemmons, NC
Ms. Joyce H. Tucker, Saint Petersburg, FL

U
Dr. Ki-bong Um, Robersonville, NC*

V
Mr. R. Dale Vaughan, Rock Hill, SC
Ms. Nancy Vernon, Chapel Hill, NC
Ms. Linda Vitale, Cary, NC

W
Mr. and Mrs. James A. Walker, Raleigh, NC
Mr. and Mrs. James R. Wallace, Charlotte, NC
Dr. Charles E. Warner, Charlotte, NC*
Wayne Foundation, Inc., Goldsboro, NC*
Mr. and Mrs. Richard A. Webb, Raleigh, NC
Mr. and Mrs. Burton J. Weiss, Pittsboro, NC
Mr. and Mrs. Thomas H. Wellman, Roanoke Rapids, NC
Mr. Edward E. Wells, Washington, NC
Mr. and Mrs. M. Holland West, Chapel Hill, NC*
Dr. and Mrs. Donald G. Wetherbee, Chapel Hill, NC
Dr. and Mrs. Charles T. White, Cary, NC
Dr. and Mrs. John Whitlock, Boone, NC
Mr. and Mrs. Donald Whitt, Pittsboro, NC
Mr. Eric J. Wilkins, New York, NY
Mr. and Mrs. John H. Williamson, Belmont, NC
Mr. Charles B. Williston, Charlotte, NC
Mr. Bradley S. Wilson and Mrs. Kristin E. Wilson, Carrboro, NC
Mr. George D. Wilson, Fayetteville, NC
Dr. and Mrs. James K. Wilson, Mount Airy, NC
Mr. and Mrs. Arthur H. Winey, Wilmington, DE
Mr. and Mrs. Paul S. Wissel, Saint Davids, PA

Y
Mr. and Mrs. Gary Yohe, Portland, CT
Mr. and Mrs. Richard D. York, Charlotte, NC
Mr. Robert O. Yount, Toccoa, GA
Mr. and Mrs. Ronnie D. Yountz, Charlotte, NC

Z
Ms. Mary L. and Mr. Joseph L. Zaragoza, Hillsborough, NC
Dr. and Mrs. Steve Zeitlin, Newton, MA
Mr. and Mrs. William N. Zelman, Chapel Hill, NC
Dr. and Mrs. John V. Zeok, Raleigh, NC
Mr. Marvin S. Zerden, Hickory, NC

****Denotes gifts of $1,000 or more and membership in the Excellence Fund MacNider Society and Medical Foundation Co-Founders' Club***

Report to Donors

Dear Medical School Alumni:

Nearly half of the alumni gave to their alma mater in fiscal year 2002-03 (July 1-June 30). This is an outstanding number and rivals any public or private medical school (125) in the country! Most importantly — scholarships, professorships, lectureships, research funds and other programs, including the Loyalty Fund, benefit from your support!

The unrestricted fund — the Loyalty Fund — received $751,500 from 40 percent of the alumni (5,250). As you know, 51 students annually receive full in-state tuition scholarships ($7,400 each in 2003-04). This generosity means a great deal in preparing the next generation of professionals.

The donor list that follows includes the names of all alumni who made contributions (pledges are not included) to any Medical Foundation account. Names in bold type contributed at the $1,000 level or above. Names in bold italics recognize alumni who gave $10,000 or more. Please call me at The Medical Foundation at (800) 962-2543 if you have a correction to this list. Every effort for accuracy has been made.

Continued alumni support has a significant impact on the growth and success of the UNC School of Medicine. Thank you for your generosity and much needed leadership.

Sincerely,

Jane M. McNeer

Jane M. McNeer
Assistant Dean and Vice President
The Medical Foundation of
North Carolina, Inc.

P.S. As you may know, UNC is in an ambitious, university-wide $1.8 billion — plus comprehensive capital campaign — The Carolina First Campaign — which began July 1999 and ends in June 2007. All gifts and pledges to the medical school, including the Loyalty Fund and Medical Alumni Endowment Campaign, count toward this important fundraising effort.

Honor Roll of Alumni Donors
2002-03

$1,000-$9,999 donors are printed in bold.
$10,000 or more are printed in bold italics.

CLASS OF 1929
Number in Class: 1
Percent Donors: 100%

Vance T. Alexander, M.D., Davidson, NC

CLASS OF 1931
Number in Class: 2
Percent Donors: 50%

J. Allen Whitaker, M.D., Rocky Mount, NC

CLASS OF 1933
Number in Class: 1
Percent Donors: 100%

Arthur F. Toole, M.D., Anniston, AL

CLASS OF 1934
Number in Class: 2
Percent Donors: 50%

William B. Patterson, M.D., Wailuku, HI

CLASS OF 1935
Number in Class: 4
Percent Donors: 25%

Julien H. Meyer, M.D., Roanoke, VA

CLASS OF 1936
Number in Class: 4
Percent Donors: 25%

Annie Louise Wilkerson, M.D., Raleigh, NC

CLASS OF 1937
Number in Class: 6
Percent Donors: 17%

Walter S. Hunt, Jr., M.D., Wilmington, NC

CLASS OF 1938
Number in Class: 5
Percent Donors: 20%

Thomas W. Crowell, M.D., Bellingham, WA

CLASS OF 1939
Number in Class: 7
Percent Donors: 14%

Henry T. Clark, Jr., M.D., Chapel Hill, NC

CLASS OF 1940
Number in Class: 13
Percent Donors: 38%

John B. Graham, M.D., Chapel Hill, NC
French H. McCain, M.D., Waite Hill, OH
Hugh H. McFadyen, M.D., Scottsdale, AZ
George B. Patrick, Jr., M.D., Silver Spring, MD
John L. Ranson, Jr., M.D., Charlotte, NC

CLASS OF 1941
Number in Class: 11
Percent Donors: 27%

Robert M. Hall, M.D., Raleigh, NC
Jack Hughes, M.D., Durham, NC
Ernest H. Yelton, M.D., Rutherfordton, NC

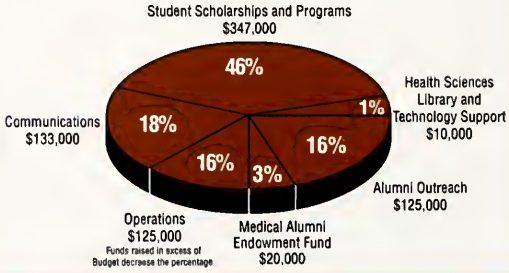
CLASS OF 1942
Number in Class: 21
Percent Donors: 43%

Jerry H. Allen, M.D., Springfield, MO
Frederick A. Blount, M.D., Winston-Salem, NC
H. William Harris, M.D., Mineola, NY
John H. Miller, M.D., Bartow, FL
Thomas S. Perrin, M.D., Charlotte, NC
James D. Piver, M.D., Emerald Isle, NC
George W. Plonk, M.D., Kings Mountain, NC
William Tenenblatt, M.D., Lake Worth, FL
R. Bertram Williams, Jr., M.D., Wilmington, NC

CLASS OF 1943
Number in Class: 22
Percent Donors: 45%

Truett V. Bennett, M.D., Oriental, NC
James R. Collett, M.D., Morganton, NC
William N. Hubbard, Jr., M.D., Kalamazoo, MI
George B. Johnston, M.D., Asheboro, NC
William A. Kirksey, M.D., Morganton, NC
Alexander C. Mitchell, M.D., Onchiota, NY
Sarah T. Morrow, M.D., M.P.H., Raleigh, NC
S. Malone Parham, M.D., Henderson, NC

Loyalty Fund Budget FY 2003-04
$760,000



Frank R. Reynolds, M.D., Wilmington, NC
Kenneth W. Wilkins, M.D., Goldsboro, NC

CLASS OF 1944
Number in Class: 30
Percent Donors: 47%

Robert J. Andrews, M.D., Wilmington, NC
J. Vincent Arey, M.D., Concord, NC
Joseph W. Baggett, M.D., Fayetteville, NC
Hilda H. Bailey, M.D., Salisbury, NC
Earl E. Correll, M.D., Kannapolis, NC
Harry D. Cox, M.D., Portsmouth, VA
Brice T. Dickson, Jr., M.D., Gastonia, NC
J. Stuart Gaul, Jr., M.D., Charlotte, NC
Clarence M. Miller, Jr., M.D., Sewickley, PA
George D. Penick, M.D., Southern Pines, NC
Charles A. Speas Phillips, M.D., Greensboro, NC
Robert R. Rascoe, Jr., M.D., Wynnewood, PA
J. Mitchell Sorrow, Jr., M.D., Chapel Hill, NC
Charles W. Tillett, M.D., Charlotte, NC

CLASS OF 1945
Number in Class: 21
Percent Donors: 67%

G. Walker Blair, Jr., M.D., Burlington, NC
G. Robert Clutts, M.D., Greensboro, NC
A. Robert Cordell, M.D., Winston-Salem, NC
J. Hicks Corey, Jr., M.D., Chattanooga, TN
Courtney D. Egerton, Jr., M.D., Asheville, NC
Grafton C. Fanney, Jr., M.D., Bonita Springs, FL
Harold L. Godwin, M.D., Fayetteville, NC
Kirby T. Hart, Jr., M.D., Petersburg, VA
Weldon H. Jordan, M.D., Fayetteville, NC
David Josephs, M.D., Baltimore, MD
John H. Monroe, M.D., Winston-Salem, NC
Roger A. Smith III, M.D., San Bernardino, CA
Clifton F. West, Jr., M.D., Chestertown, MD
Dean F. Winn, Jr., M.D., Medford, OR

CLASS OF 1946
Number in Class: 24
Percent Donors: 50%

Ira A. Abrahamson, Jr., M.D., Long Boat Key, FL
David Y. Cooper III, M.D., Bryn Mawr, PA
Crowell T. Daniel, Jr., M.D., Fayetteville, NC
Mary Alice V. Fox, M.D., Mount Desert, ME
Robert S. Lackey, M.D., Charlotte, NC
Roland D. Matthews, M.D., Burlington, NC
James E. McKinney, M.D., Chattanooga, TN
William E. Sheely, M.D., Alexandria, VA
David G. Stroup, M.D., Savannah, GA
Arthur R. Summerlin, Jr., M.D., Raleigh, NC
Allen D. Tate, Jr., M.D., Burlington, NC
John E. Weyher, Jr., M.D., Wilmington, NC

CLASS OF 1947
Number in Class: 11
Percent Donors: 36%

Barbara C. Newborg, M.D., Durham, NC
Erle E. Peacock, Jr., M.D., Chapel Hill, NC
Harry G. Walker, M.D., Statesville, NC
Sarah L. Warren, M.D., Chapel Hill, NC

CLASS OF 1948
Number in Class: 20
Percent Donors: 25%

Robert R. Aycock, M.D., Saint Helena, CA
Louis T. Kermon, M.D., Raleigh, NC
Julius A. MacKie, Jr., M.D., Bryn Mawr, PA
Shirley L. Rivers, M.D., Tucson, AZ
Daniel T. Young, M.D., Chapel Hill, NC

CLASS OF 1949
Number in Class: 33
Percent Donors: 33%

J. Dewey Dorsett, Jr., M.D., Charlotte, NC
Christopher C. Fordham III, M.D., Chapel Hill, NC
John M. Gambill, M.D., Elkin, NC
F. Sidney Gardner, Jr., M.D., Fayetteville, NC
Spinks H. Marsh, M.D., Punta Gorda, FL
Edward B. McKenzie, M.D., Statesville, NC
Charles F. Melchor, Jr., M.D., Myrtle Beach, SC
Edwin W. Monroe, M.D., Greenville, NC
Arthur C. Quackenbush, M.D., Vero Beach, FL
G. Earl Trevathan, Jr., M.D., Greenville, NC
Maxine D. Wallace, M.D., Oakland, CA

CLASS OF 1950
Number in Class: 34
Percent Donors: 59%

Gertrude A. Bales, M.D., Rochester, NY
Frederick O. Bowman, Jr., M.D., Chapel Hill, NC
W. Grimes Byerly, Jr., M.D., Hickory, NC
Jack O. Carson, M.D., Grifton, NC
Buel K. Grow, Jr., M.D., Belle Meade, NJ
Joel B. Huneycutt, M.D., Lake Wylie, SC
George Johnson, Jr., M.D., Chapel Hill, NC
Harvey W. Johnston, M.D., Charlotte, NC
William S. Joyner, M.D., Durham, NC
John A. Kirkland, M.D., Wilson, NC
Dan A. Martin, M.D., Madisonville, KY
John L. McCain, M.D., Wilson, NC
Glenn D. Moak, M.D., Indianapolis, IN
J. Olin Perritt, Jr., M.D., Wilmington, NC
Eugene B. Sharpe, M.D., Asheville, NC
Lewis S. Thorp, Jr., M.D., Rocky Mount, NC
Belk C. Troutman, M.D., Grifton, NC
Charles R. Vernon, M.D., Wrightsville Beach, NC
John L. Watters, M.D., Raleigh, NC
John R. Wilkinson, Jr., M.D., Hickory, NC

CLASS OF 1951
Number in Class: 39
Percent Donors: 28%

John S. Barlow, M.D., Concord, MA
S. Bruce Berkeley, Jr., M.D., Goldsboro, NC
Baxter H. Byerly, M.D., Tallahassee, FL
A. James Coppridge, M.D., Durham, NC
William A. Futch, M.D., Conyers, GA
R. Wharton Gaul, M.D., Murrells Inlet, SC
Harold C. Lane, M.D., Rutherfordton, NC
Karl L. Lawing, M.D., Lincolnton, NC
Martin T. Lewis, M.D., Beaufort, NC
Luther W. Oehlbeck, Jr., M.D., Labelle, FL
Charles C. Stamey, M.D., Winston-Salem, NC

CLASS OF 1952
Number in Class: 6
Percent Donors: 17%

Charles H. Powell, M.D., Ormond Beach, FL

CLASS OF 1954
Number in Class: 27
Percent Donors: 52%

Paul H. Brigman, M.D., Trinity, NC
A. Joseph Diab, M.D., Raleigh, NC
Malcolm Fleishman, M.D., Fayetteville, NC
Charles B. Fulghum, Jr., M.D., Atlanta, GA
J. Franklin Graves, M.D., Edisto Island, SC
Sara L. Hoyt, M.D., Asheville, NC
Robert S. Jones, M.D., Shelby, NC
James C. Parke, Jr., M.D., Charlotte, NC
Cornelius T. Partrick, M.D., Washington, NC
Ely J. Perry, Jr., M.D., Kinston, NC
William H. Weinel, Jr., M.D., Wrightsville Beach, NC
Edward S. Williams, Jr., M.D., Durham, NC
Stephen G. Wilson, Jr., M.D., Knoxville, TN
Virgil A. Wilson, M.D., Winston-Salem, NC

CLASS OF 1955
Number in Class: 47
Percent Donors: 55%

Julian S. Albergotti, Jr., M.D., Charlotte, NC
Robert G. Brame, M.D., Clemmons, NC
Ralph E. Brooks, Jr., M.D., Colfax, NC
Walter E. Deyton, M.D., Danville, VA
Griggs C. Dickson, M.D., Charlotte, NC
Presley Z. Dunn, Jr., M.D., Greensboro, NC
Charles F. Eddinger, M.D., Spencer, NC
John W. Foust, M.D., Charlotte, NC
J. Eugene Glenn, M.D., Jacksonville, FL
James W. Hayes III, M.D., Burlington, NC
William D. Huffines, M.D., Chapel Hill, NC
Samuel G. Jenkins, Jr., M.D., Elizabeth City, NC
Robert C. Jordan, Jr., M.D., Sanford, NC
Samuel B. Joyner, M.D., Greensboro, NC
A. Smith Lineberger, Jr., M.D., Wilmington, NC
William L. London IV, M.D., Durham, NC
J. Thaddeus Monroe, Jr., M.D., Chapel Hill, NC
Thomas P. Moore, M.D., Jacksonville, NC
G. Irvin Richardson, M.D., Reidsville, NC
Harold R. Roberts, M.D., Chapel Hill, NC
Oliver F. Roddey, Jr., M.D., Charlotte, NC
Palmer F. Shelburne, M.D., Greensboro, NC
Henry L. Stephenson, Jr., M.D., Washington, NC
Robert L. Summerlin, Jr., M.D., Dublin, NC
G. Reginald Tucker, Jr., M.D., Emerald Isle, NC
W. Wallace White, M.D., Cincinnati, OH

CLASS OF 1956
Number in Class: 44
Percent Donors: 48%

Richard A. Boyd, M.D., Statesville, NC

Wade M. Brannan, M.D., Port Arthur, TX
Thomas E. Castelloe, M.D., Raleigh, NC
John W. Deyton, Jr., M.D., Jacksonville, NC
William E. Easterling, Jr., M.D., Chapel Hill, NC
John T. Evans, M.D., Chattanooga, TN
Robert A. Farmer, M.D., Vacaville, CA
Francis W. Green, M.D., Albemarle, NC
Otis M. Lowry, M.D., Spring Hope, NC
William W. McLendon, M.D., Chapel Hill, NC
Robert L. Murray, M.D., Roanoke, VA
John W. Ormand, Jr., M.D., Wilmington, NC
Clifton G. Payne, M.D., Reidsville, NC
Francis D. Pepper, Jr., M.D., Winston-Salem, NC
William R. Purcell, M.D., Laurinburg, NC
James F. Richards, Jr., M.D., Orlando, FL
W. R. Stafford, Jr., M.D., Greensboro, NC
John W. Vassey, M.D., Raleigh, NC
Garland E. Wampler, M.D., Burnsville, NC
William B. Wood, M.D., Chapel Hill, NC
Leonard S. Woodall, M.D., P.A., Smithfield, NC

CLASS OF 1957
Number in Class: 45
Percent Donors: 53%

H. John Bradley, Jr., M.D., Greensboro, NC
James H. Burrus, M.D., Shelby, NC
James R. Clapp, M.D., Durham, NC
Robert S. Cline, M.D., Sanford, NC
Luther H. Clontz, M.D., Morganton, NC
William P. Cornell, M.D., Paradise Valley, AZ
George S. Edwards, Sr., M.D., Raleigh, NC
Eric L. Fearrington, M.D., Pine Knoll Shores, NC
James B. Glover, M.D., Wilson, NC
Lois T. Harris, M.D., Chapel Hill, NC
Bennett A. Hayes, Jr., M.D., Fayetteville, NC
Jack B. Hobson, M.D., Charlotte, NC
J. Paul Hurst, Jr., M.D., Rydal, PA
George L. Irvin III, M.D., Coral Gables, FL
Thomas M. Johnson, M.D., Smithfield, NC
Richard V. Liles, Jr., M.D., Albemarle, NC
H. Maxwell Morrison, Jr., M.D., Southern Pines, NC
Harvey A. Page, M.D., Pikeville, KY
Thaddeus H. Pope, Jr., M.D., Indianapolis, IN
Raeford T. Pugh, M.D., Washington, NC
James H. M. Thorp, M.D., Rocky Mount, NC
Gerald M. Wagger, M.D., Palo Alto, CA
Earl P. Welch, Jr., M.D., Winston-Salem, NC
Robert T. Whitlock, M.D., Easton, MD

CLASS OF 1958
Number in Class: 43
Percent Donors: 60%

Clarence A. Bailey, Jr., M.D., Durham, NC
John I. Brooks, Jr., M.D., Tarboro, NC
Rebecca H. Buckley, M.D., Durham, NC
Maurice L. Canaday, M.D., Lincolnton, NC
M. Paul Capp, M.D., Tucson, AZ
David B. Crosland, M.D., Mount Pleasant, NC
J. Ron Edwards, M.D., Raleigh, NC
George E. Ennis, M.D., Hickory, NC
Nancy P. Fawcett, M.D., Pembroke Pines, FL
Carl A. Furr, Jr., M.D., Concord, NC
Thomas M. Haizlip, M.D., Raleigh, NC
George W. Hamby, M.D., Chapel Hill, NC
Dan E. Johnson, M.D., Concord, NC
Walter N. Long, Jr., M.D., Taylorsville, NC
Charles T. Macy, M.D., Philadelphia, PA
Vernon W. McFalls, M.D., High Point, NC
John A. McGee, Jr., M.D., Charlotte, NC
Luther S. Nelson, M.D., Amarillo, TX
T. Lane Ormand, M.D., Monroe, NC
Barry R. Pate, M.D., Asheville, NC
Dewey H. Pate, M.D., Raleigh, NC
J. Richard Patterson, M.D., Danville, VA
Charles W. Phillips, Jr., M.D., Gibsonville, NC
W. Robert Story, M.D., North Wilkesboro, NC
Charles W. Stout, M.D., Asheboro, NC
B. Everett Thompson, Jr., M.D., Cary, NC

CLASS OF 1959
Number in Class: 40
Percent Donors: 40%

Robert C. Brown, M.D., Chapel Hill, NC
D. Whitaker Davis, M.D., Wadesboro, NC
A. Eugene Douglas, Jr., M.D., Bald Head Island, NC
Otis N. Fisher, Jr., M.D., Greensboro, NC
Joel S. Goodwin, M.D., Salisbury, NC
Robert L. Green, Sr., M.D., Winston-Salem, NC
O. James Hart, Jr., M.D., Mocksville, NC
A. Tyson Jennette, M.D., Wilson, NC
F. Smith Johnston, Jr., M.D., Raleigh, NC
Morris A. Jones, Jr., M.D., Chapel Hill, NC
Wilfred D. Little, Jr., M.D., Anna Maria, FL
Edward L. Mitchell, M.D., Prospect, KY
Julian W. Selig, Jr., M.D., Elizabeth City, NC
Martha K. Sharpless, M.D., Greensboro, NC
Charles E. Trado, Jr., M.D., Hickory, NC
C. Carl Warren, Jr., M.D., Charlotte, NC

CLASS OF 1960
Number in Class: 58
Percent Donors: 34%

William B. Abernethy, Jr., M.D., Gastonia, NC
Leo R. Anderson, M.D., Corona Del Mar, CA
Charles P. Eldridge, Jr., M.D., Houston, TX
Charles E. Fitzgerald, Jr., M.D., Altamonte Springs, FL
J. Thomas Fox, Jr., M.D., Valle Crucis, NC
James R. Harper, M.D., Durham, NC
Falls L. Harris, M.D., Greenville, SC
G. Wyckliffe Hoffler, M.D., Titusville, FL
J. Gray McAllister III, M.D., Chapel Hill, NC
K. Franklin McCain, M.D., Winston-Salem, NC
Duncan S. Owen, Jr., M.D., Richmond, VA
Robert B. Payne, M.D., Mooresville, NC
Jerry M. Petty, M.D., Charlotte, NC
Elizabeth V. Raft, M.D., Durham, NC
Robert F. Sloop, Jr., M.D., Wilson, NC
G. Thomas Strickland, Jr., M.D., Baltimore, MD
John C. Tayloe, M.D., New Bern, NC
H. Mac Vandiviere, M.D., Lancaster, KY
P. Burt Veazey, M.D., Sarasota, FL
John A. Young, M.D., Charlotte, NC

CLASS OF 1961
Number in Class: 50
Percent Donors: 44%

William L. Brown, M.D., Roanoke Rapids, NC
H. David Bruton, M.D., Carthage, NC
Cosmo A. Difazio, M.D., Ph.D., Charlottesville, VA
William S. Gibson, Jr., M.D., Riverside, PA
John C. Graham, Jr., M.D., Kitty Hawk, NC
L. Morgan Hale, M.D., Chapel Hill, NC
William H. Kouri, M.D., Isle of Palms, SC
Lloyd D. Lohr, M.D., Lexington, NC
Zell A. McGee, M.D., Salt Lake City, UT
W. Stacy Miller, M.D., Raleigh, NC
William W. Morgan, Jr., M.D., Reno, NV
A. Ray Newsome, M.D., Winston-Salem, NC
C. Rex O'Briant, M.D., Gilbert, AZ
William L. Owens, M.D., Clinton, NC
Leonard E. Reaves III, M.D., Fayetteville, NC
Bobby A. Richardson, M.D., Ocala, FL
James H. Robinson, M.D., Wilmington, NC
Edward A. Sharpless, M.D., Greensboro, NC
W. Ferrell Shuford, Jr., M.D., Wilmington, NC
Joshua Tayloe, M.D., Washington, NC
Zebulon Weaver III, M.D., Asheville, NC
Donn A. Wells, M.D., Fort Lauderdale, FL

CLASS OF 1962
Number in Class: 48
Percent Donors: 42%

Karl L. Barkley, M.D., Greensboro, NC
Joseph H. Callicott, Jr., M.D., Lynchburg, VA
Lawrence M. Cutchin, M.D., Tarboro, NC
Jerry J. Eller, M.D., Livingston, AL
A. Ray Evans, M.D., Greenville, NC
Marion W. Griffin, M.D., Asheboro, NC
H. Gerard Hartzog III, M.D., Raleigh, NC
Ray M. Hayworth, M.D., Knoxville, TN
Charles M. Hicks, M.D., Wilmington, NC
J. Newton MacCormack, M.D., Raleigh, NC
John L. Monroe, M.D., West End, NC
Kenny J. Morris, M.D., Wilmington, NC
Carl S. Phipps, M.D., Winston-Salem, NC
Alton A. Reeder, M.D., High Point, NC
J. Flint Rhodes, M.D., Raleigh, NC
Lambros C. Rigas, M.D., Rome, GA
Henry C. Turner, M.D., Winston-Salem, NC
Roy V. Varner, M.D., Houston, TX
David T. Watson, M.D., Atlanta, GA
Abner C. Withers, M.D., Salisbury, NC

CLASS OF 1963
Number in Class: 51
Percent Donors: 55%

William P. Algary, M.D., Greenville, SC
Neil C. Bender, M.D., New Bern, NC
Karl F. Bitter, M.D., Asheville, NC
J. Andrew Burnam, M.D., Fort Myers, FL
I. Kelman Cohen, M.D., Richmond, VA
Charles L. Cooke, M.D., Richmond, VA

Donald L. Copeland, M.D., Cornelius, NC
Robert J. Cowan, M.D., Winston-Salem, NC
John W. Dalton, Jr., M.D., Santa Monica, CA
Dave M. Davis, M.D., Atlanta, GA
William B. Deal, M.D., Birmingham, AL
J. Michael Gallagher, M.D., Seattle, WA
J. Phillip Goodson, M.D., Raleigh, NC
Ira M. Hardy II, M.D., Greenville, NC
George C. Hemingway, Jr., M.D., Tarboro, NC
Charles I. Loftin III, M.D., Roanoke, VA
James L. Parker, M.D., Hickory, NC
Eugene W. Pate, Jr., M.D., Kinston, NC
Charles J. Sawyer III, M.D., Ahoskie, NC
Samuel E. Scott, M.D., Burlington, NC
Richard W. Shermer, M.D., Chapel Hill, NC
David W. Sillmon, M.D., Greensboro, NC
Jerry A. Smith, M.D., Memphis, TN
W. Landis Voigt, M.D., Edenton, NC
Roy A. Weaver, M.D., Fayetteville, NC
Jack H. Welch, M.D., Greenville, NC
James G. White, M.D., Ormond Beach, FL
David R. Williams, Sr., M.D., Thomasville, NC

CLASS OF 1964
Number in Class: 53
Percent Donors: 34%

J. Nichols Beard, M.D., Charlotte, NC
R. Kivette Bowman, M.D., Raleigh, NC
Harry L. Broome, M.D., Alpharetta, GA
John R. Cella, M.D., Raleigh, NC
Roy L. Curry, Jr., M.D., San Francisco, CA
James F. Earnhardt, M.D., Winston-Salem, NC
Clyde M. Gaffney III, M.D., Greer, SC
G. Patrick Henderson, Jr., M.D., Southern Pines, NC
E. Carmack Holmes, Jr., M.D., Pacific Palisades, CA
E. Woodrow Hunt, Jr., M.D., La Jolla, CA
Noel B. McDevitt, M.D., Southern Pines, NC
Malcolm N. McLeod, M.D., Chapel Hill, NC
Artus M. Moser, Jr., M.D., Swannanoa, NC
Robert J. Pierce, Jr., M.D., Hickory, NC
Robert E. Price, Jr., M.D., Durham, NC
Marshall E. Redding, M.D., Long Beach, CA
James W. Rose, Jr., M.D., Madison, WI
Robin N. Wooten, Jr., M.D., Lakeland, FL

CLASS OF 1965
Number in Class: 50
Percent Donors: 28%

L. Bernard Branch, M.D., Lexington, KY
Daniel E. Brown, M.D., Raleigh, NC
Hal F. Collier, M.D., Flowery Branch, GA
Takey Crist, M.D., Jacksonville, NC
Robert V. Fulk, Jr., M.D., Wilmington, NC
Charles P. Graham, Jr., M.D., Topeka, KS
Robert L. Grubb, Jr., M.D., Glendale, MO
Howard Holderness, Jr., M.D., Greensboro, NC
Robert T. Kindley, M.D., Robbinsville, NC
Gordon B. LeGrand, M.D., Raleigh, NC
Donald D. McNeill, Jr., M.D., Lenoir, NC
Thomas L. Presson, M.D., Greensboro, NC
Evin H. Sides III, M.D., Raleigh, NC
Williamson B. Strum, M.D., LaJolla, CA

CLASS OF 1966
Number in Class: 58
Percent Donors: 64%

J. Curtis Abell, M.D., Statesville, NC
Robert P. Barringer, M.D., Gastonia, NC
Robert H. Bilbro, M.D., Raleigh, NC
Timothy E. Cloninger, M.D., Charlotte, NC
George W. Cox, M.D., Atlanta, GA
John R. Crawford III, M.D., Salisbury, NC
J. Bernard Credle, M.D., Beaufort, SC
William M. Crutchfield, M.D., Elizabeth City, NC
Philip C. Deaton, M.D., Greensboro, NC
Edgar C. Garrabrant II, M.D., Raleigh, NC
Robert C. Gibson III, M.D., Portland, OR
Cyrus L. Gray III, M.D., Hiawassee, GA
George T. Grigsby, Jr., M.D., Las Vegas, NV
Carol H. Hackett, M.D., Bellview, WA
Howard T. Hinshaw, M.D., Charlotte, NC
N. Neil Howell, M.D., Charlotte, NC
Elizabeth S. Hoyt, M.D., Cary, NC
William C. Hubbard, M.D., Raleigh, NC
Stanleigh E. Jenkins, Jr., M.D., Ahoskie, NC
Thomas J. Koontz, M.D., Winston-Salem, NC
Sidney C. Kress, M.D., Staten Island, NY
Jacob A. Lohr, M.D., Chapel Hill, NC
Hugh A. McAllister, Jr., M.D., Houston, TX
Edgar M. McGee, M.D., Lexington, KY
Peter L. Morris, M.D., Santa Barbara, CA
Hugh G. Murray, Jr., M.D., Atlanta, GA
R. Kenneth Pons, M.D., Medford, OR
Surry P. Roberts, M.D., Raleigh, NC
Charles K. Scott, M.D., Haw River, NC
Robert E. Sevier, M.D., Greensboro, NC
James L. Sigmon, Jr., M.D., Davidson, NC
H. Lee Smyre, M.D., Greer, SC
W. Franklin Steele, M.D., Valdese, NC
E. Walker Stevens, Jr., M.D., Greensboro, NC
W. Beverly Tucker III, M.D., Henderson, NC
James H. Whicker, M.D., Raleigh, NC
James A. Yount, M.D., Charlotte, NC

CLASS OF 1967
Number in Class: 62
Percent Donors: 47%

George R. Avant, M.D., Nashville, TN
F. Walton Avery, M.D., Chapel Hill, NC
Rudy W. Barker, M.D., Durham, NC
Gerald W. Blake, M.D., Raleigh, NC
Thomas W. Bundy, M.D., Chambersburg, PA
Vartan A. Davidian, Jr., M.D., Raleigh, NC
C. Allan Eure, M.D., Raleigh, NC
Harvey J. Hamrick, M.D., Chapel Hill, NC
E. Franklin Hart, Jr., M.D., Morganton, NC
L. Fuller Honeycutt, Jr., M.D., Raleigh, NC
James D. Hundley, M.D., Wilmington, NC
Linda H. Jackson, M.D., Arden, NC
William H. Jarman, Jr., M.D., Gastonia, NC
Scott G. Kleiman, M.D., Marietta, GA
Hugh T. Lefler, Jr., M.D., Fort Worth, TX
Clifford T. Lewis, Jr., M.D., Wilmington, NC
Robert W. Madry, Jr., M.D., Corpus Christi, TX
W. Jason McDaniel, Jr., M.D., Raleigh, NC
Donald H. McQueen III, M.D., Rock Hill, SC
Harold B. Owens, M.D., Danville, VA
Gerald Pelletier, Jr., M.D., New Bern, NC
Bruce A. Phillips, Jr., M.D., Elizabethtown, NC
Douglas M. Russell, M.D., Goldsboro, NC
Walter R. Sabiston, M.D., Kinston, NC
James H. Spruill, M.D., Jackson, TN
Henry C. Thomason, Jr., M.D., Gastonia, NC
M. Dennis Wachs, M.D., Bedford, NH
Benjamin K. Ward, Jr., M.D., Florence, SC
Barry M. Welborne, M.D., Charlotte, NC

CLASS OF 1968
Number in Class: 60
Percent Donors: 55%

Joseph P. Archie, Jr., M.D., Raleigh, NC
George W. Bensch, M.D., Acampo, CA
Lucius Blanchard, Jr., M.D., Henderson, NV
Alan Davidson III, M.D., Greensboro, NC
Terry D. Golden, M.D., Atlanta, GA
Theodora L. Gongaware, M.D., Savannah, GA
Joseph W. Griffin, Jr., M.D., Augusta, GA
W. Franklin Hancock, Jr., M.D., Burlington, NC
Hoke F. Henderson, Jr., M.D., Columbia, SC
William O. Kearse, Jr., M.D., Lubbock, TX
John L. Kirkland III, M.D., Houston, TX
Edward W. Kouri, M.D., Charlotte, NC
Jerold E. Lancourt, M.D., Dallas, TX
Patrick T. Malone, M.D., Atlanta, GA
James M. Nesbitt, Jr., M.D., Anchorage, AK
David J. Reese II, M.D., Alexandria, VA
James M. Rhyne, M.D., Statesville, NC
Albert L. Roper II, M.D., Norfolk, VA
David M. Rubin, M.D., Greensboro, NC
Carole W. Samuelson, M.D., Birmingham, AL
John E. Schweistris III, M.D., Savannah, GA
E. Franklin Shavender, M.D., Durham, NC
Robert B. Shearin, M.D., Chevy Chase, MD
George S. Stretcher, M.D., Spartanburg, SC
William S. Teachey, M.D., Virginia Beach, VA
F. Charles Tucker, Jr., M.D., Gulf Breeze, FL
Robert C. Vanderberry, Jr., M.D., Raleigh, NC
J. Allen Whitaker III, M.D., Wilson, NC
Walter C. Whitehurst, Jr., M.D., Wilmington, NC
Morris E. Williams, Jr., M.D., Greenville, SC
Roberta G. Williams, M.D., La Canada, CA
Jerry C. Woodard, M.D., Wilson, NC
John H. Wright, Jr., M.D., Winston-Salem, NC

CLASS OF 1969
Number in Class: 62
Percent Donors: 42%

H. Wallace Baird, M.D., Greensboro, NC

J. Hugh Bryan, M.D., Fayetteville, NC
W. Woodrow Burns, Jr., M.D., Chapel Hill, NC
Don C. Chaplin, M.D., Burlington, NC
R. Samuel Cromartie III, M.D., Ormond Beach, FL
C. Ellis Fisher, M.D., Gastonia, NC
Thomas R. Griggs, M.D., Hillsborough, NC
G. Patrick Guiteras, M.D., Chapel Hill, NC
Edward W. Haselden, Jr., M.D., Columbia, SC
John G. Johnston, M.D., Charlotte, NC
Dr. and Mrs. William R. Jordan, Fayetteville, NC
Henry J. MacDonald, Jr., M.D., New Bern, NC
R. James MacNaughton, Jr., M.D., Greenville, SC
Donald M. MacQueen III, M.D., Wilmington, NC
J. Tift Mann III, M.D., Raleigh, NC
W. Dickson Moss III, M.D., Cookeville, TN
David W. Pearsall, Jr., M.D., Greenville, NC
H. Harris Pittman, M.D., Cave Springs, GA
Joseph D. Russell, M.D., Wilson, NC
David S. Sheps, M.D., Gainesville, FL
James W. Snyder, M.D., Wilmington, NC
Karen C. Sorrels, M.D., Midlothian, VA
Franklin T. Tew, M.D., Chapel Hill, NC
John C. Triplett, M.D., M.P.H., Dulles, VA
W. Robert Turlington, M.D., Jacksonville, NC
Nelson B. Watts, M.D., Cincinnati, OH

CLASS OF 1970
Number in Class: 65
Percent Donors: 52%

William C. Allsbrook, Jr., M.D., Martinez, GA
Charles M. Almond, M.D., Wilmington, NC
H. Clifford Baggett, Jr., M.D., Raleigh, NC
Jerry C. Bernstein, M.D., Raleigh, NC
Robert G. Blair, Jr., M.D., New Bern, NC
Harold H. Cameron, M.D., New Bern, NC
Daniel L. Crocker, Jr., M.D., Rocky Mount, NC
Charles E. Crumley, M.D., Lincolnton, NC
H. Shelton Earp III, M.D., Chapel Hill, NC
Mary H. Edwards, M.D., Pittsburgh, PA
Richard M. Freeman, M.D., Opelika, AL
James O. Goodwin, M.D., Henderson, NC
Joseph M. Harmon, M.D., Mount Pleasant, SC
W. Borden Hooks, Jr., M.D., Mount Airy, NC
Donald D. Howe, M.D., Gastonia, NC
Dr. and Mrs. Mark G. Janis, Seal Beach, CA
C. Bryan Koon, Jr., M.D., Durham, NC
Frederick G. Kroncke, Jr., M.D., Rocky Mount, NC
Thomas W. Nicholson, M.D., Bath, NC
Edward A. Norfleet, M.D., Chapel Hill, NC
L. Christine Oliver, M.D., Brookline, MA
Martha E. Parker, M.D., Weaverville, NC
R. Kirby Primm, M.D., Wenatchee, WA
Thomas A. Roberts, Jr., M.D., Charlotte, NC
A. Stevens Rubin, Jr., M.D., Chatsworth, CA
M. Eugene Sherman, M.D., Englewood, CO
James B. Sloan, M.D., Wilmington, NC
James D. Smithwick, M.D., Laurinburg, NC
T. Reed Underhill, M.D., New Bern, NC
Ross L. Vaughan, M.D., Raleigh, NC
E. Lance Walker, M.D., Littleton, CO
William J. Weatherly, M.D., Greensboro, NC
H. Grey Winfield III, M.D., Hickory, NC
John W. Zirkle, M.D., Jefferson City, TN

CLASS OF 1971
Number in Class: 69
Percent Donors: 38%

John V. Allcott III, M.D., Eugene, OR
J. Richard Auman, M.D., Chesapeake, VA
Robert A. Bashford, M.D., Chapel Hill, NC
Robert H. Cohan, M.D., Pensacola, FL
James S. Coxe III, M.D., Raleigh, NC
Jane M. Foy, M.D., Oak Ridge, NC
James S. Fulghum III, M.D., Raleigh, NC
Mary Susan Fulghum, M.D., Raleigh, NC
Joe E. Gaddy, Jr., M.D., Winston-Salem, NC
Michael R. Knowles, M.D., Chapel Hill, NC
Robert L. Kuykendal, M.D., Cincinnati, OH
William A. Lambeth III, M.D., Raleigh, NC
Donald V. Lewis, M.D., Cooperstown, NY
Richard A. Nelson, M.D., Cordova, TN
Frederick S. Neuer, M.D., Emporia, KS
William B. Pittman, M.D., Rocky Mount, NC
R. Randolph Powell, M.D., Fox Point, WI
John O. Reynolds, Jr., M.D., Salisbury, NC
James A. Scovil, Jr., M.D., Raleigh, NC
J. Allison Shivers, M.D., Asheville, NC
Sara H. Sinal, M.D., Winston-Salem, NC
John P. Surratt, M.D., Clinton, NC
J. Peter Van Dorsten, M.D., Charleston, SC
George C. Venters, M.D., Raleigh, NC
David K. Wagoner, M.D., Charlotte, NC
Dwight W. Wait III, M.D., Charlotte, NC

CLASS OF 1972
Number in Class: 69
Percent Donors: 36%

Robert L. Barnes III, M.D., Knoxville, TN
Myron H. Brand, M.D., Madison, CT
Peter R. Bream, M.D., Jacksonville, FL
L. Franklin Cashwell, Jr., M.D., Greensboro, NC
Randolph B. Cooke, M.D., Owego, NY
J. McNeill Gibson, M.D., Davidson, NC
Benjamin W. Goodman, Jr., M.D., Hickory, NC
Walter B. Greene, M.D., Columbia, MO
Alger V. Hamrick III, M.D., Raleigh, NC
L. Clayton Harrell III, M.D., Charlotte, NC
Hubert B. Haywood III, M.D., Raleigh, NC
F. Christian Heaton, M.D., Raleigh, NC
John T. Henley, Jr., M.D., Fayetteville, NC
Larry A. High, Jr., M.D., Rocky Mount, NC
John S. Hughes, M.D., New Haven, CT
Joseph A. Jackson, M.D., Pilot Mountain, NC
Bruce L. Kihlstrom, M.D., Durham, NC
Michael J. Kirby, M.D., Columbia, SC
Howard S. Kroop, M.D., Woodbury, NJ
John R. Lurain III, M.D., Oak Park, IL
John T. Manning, Jr., M.D., Houston, TX
Steven R. Mills, M.D., Chapel Hill, NC
James S. Reed, M.D., Gig Harbor, WA
J. Frederick Wolfe, M.D., Knoxville, TN
J. Richard Young, M.D., Sherborn, MA

CLASS OF 1973
Number in Class: 77
Percent Donors: 43%

Frederic F. Bahnson III, M.D., Brevard, NC
Kenneth Banks, M.D., Zebulon, NC
G. Ruffin Benton III, M.D., Brevard, NC
Stephen A. Bernard, M.D., Chapel Hill, NC
Stephen B. Billick, M.D., New York, NY
Jesse A. Blackman, M.D., P.A., Fremont, NC
Franklin S. C. Clark III, M.D., Fayetteville, NC
Melvin L. Clayton, M.D., Ahoskie, NC
Charles H. Edwards II, M.D., Charlotte, NC
John E. Estes, Jr., M.D., Rocky Mount, NC
J. Robert Forstner, M.D., Southport, NC
E. Ruffin Franklin, Jr., M.D., Raleigh, NC
Robert L. Fritz, M.D., Charlottesville, VA
Terry L. Fry, M.D., Georgetown, SC
David A. Grimes, M.D., Chapel Hill, NC
J. Michael Harper, M.D., Knoxville, TN
E. Earl Jenkins, Jr., M.D., York, SC
J. Charles Jennette, M.D., Chapel Hill, NC
Colin D. Jones, M.D., Winton, NC
Elisabeth A. Keller, M.D., Brookline, MA
James N. Martin, Jr., M.D., Jackson, MS
James L. Maynard, M.D., Rock Hill, SC
Dale A. Newton, M.D., Greenville, NC
Gary S. Niess, M.D., Charlotte, NC
David R. Patterson, M.D., Greensboro, NC
W. Henry Purvis, M.D., Sanford, NC
W. McLean Reavis, Jr., M.D., Lakeland, FL
C. Stewart Rogers, M.D., Greensboro, NC
Donald R. Rollins, M.D., Lewisburg, WV
Susan S. Sherman, M.D., Englewood, CO
S. Wayne Smith, M.D., Raleigh, NC
Robert R. Walther, M.D., New York, NY
William H. Whisnant, M.D., Bristol, TN

CLASS OF 1974
Number in Class: 93
Percent Donors: 35%

Robert M. Alsup, M.D., Winston-Salem, NC
Thomas W. Bouldin, M.D., Chapel Hill, NC
W. Griffith Bowen, M.D., St. Louis, MO
Douglas C. Brewer, M.D., Elm City, NC
Paul S. Camnitz, M.D., Greenville, NC
David R. Clemmons, M.D., Chapel Hill, NC
George W. Colclough, M.D., Lexington, KY
David L. Coppedge, M.D., Braintree, MA
William F. Cox, Jr., M.D., Steamboat Springs, CO
Paul M. Deaton, Jr., M.D., Charleston, SC
Donna E. Frick, M.D., Chapel Hill, NC
Stephanie K. Garza, M.D., Austin, TX
Martha F. Goetsch, M.D., Portland, OR
Margaret A. Harper, M.D., Winston-Salem, NC
C. Norman Hurwitz, M.D., Greenwood, IN
Lynn D. Ikenberry, M.D., Chapel Hill, NC
Joseph M. Jenkins, M.D., Fayetteville, NC

John A. Lang III, M.D., Raleigh, NC
William D. Lee, Jr., M.D., Raleigh, NC
Thomas W. Littlejohn III, M.D., Winston-Salem, NC
Clarence E. Lloyd, Jr., M.D., Greensboro, NC
Sheppard A. McKenzie III, M.D., Raleigh, NC
William H. Moretz, Jr., M.D., Augusta, GA
H. Clifton Patterson III, M.D., Raleigh, NC
James E. Phillips, M.D., Oak Ridge, TN
Harold C. Pollard III, M.D., Winston-Salem, NC
C. Fredric Reid, M.D., Winston-Salem, NC
Suzanne Van Houten Sauter, M.D., Chapel Hill, NC
Roger L. Snow, M.D., Boston, MA
David E. Tart, M.D., Hickory, NC
David T. Tayloe, Jr., M.D., Goldsboro, NC
Kenneth H. Wilson, M.D., Chapel Hill, NC
William G. Wilson, M.D., Charlottesville, VA

CLASS OF 1975
Number in Class: 100
Percent Donors: 32%

E. Jackson Allison, Jr., M.D., Syracuse, NY
Vaughn R. Arey, M.D., Galax, VA
Bruce A. Berlow, M.D., Mystic, CT
William J. Blackley, M.D., Elkin, NC
Sherif B. Botros, M.D., Wilmington, NC
Julian T. Brantley, Jr., M.D., Vienna, VA
Samuel L. Bridgers II, M.D., Woodbridge, CT
E. Drew Bridges, M.D., Wake Forest, NC
Richard F. Fox, M.D., Greensboro, NC
M. Darvy Fuller, Jr., M.D., Las Cruces, NM
Donald G. Gregg, M.D., Greenville, SC
Eric H. Helsabeck, M.D., Asheboro, NC
Ernest F. Krug III, M.D., Rochester, MI
David S. Lennon, M.D., Waxhaw, NC
Robert H. Lester, M.D., Cramerton, NC
Howard A. McMahan, M.D., Marietta, GA
Frank J. Miller, M.D., Chattanooga, TN
Frank H. Moretz, M.D., Asheville, NC
Wade H. Moser, Jr., M.D., Raleigh, NC
Dan A. Myers, M.D., Kinston, NC
W. Ronald Neal, M.D., Greensboro, NC
Henry N. Nelson III, M.D., Indialantic, FL
Stephen L. E. Okiye, M.D., Saint Thomas, VI
Henry E. Parfitt, Jr., M.D., Fayetteville, NC
James E. Peacock, Jr., M.D., Winston-Salem, NC
Joseph R. Pringle, Jr., M.D., Burlington, NC
W. Paul Sawyer, M.D., Tallahassee, FL
Kenneth K. Steinweg, M.D., Greenville, NC
Carol B. Teutsch, M.D., Gwynedd Valley, PA
Hendricks H. Whitman III, M.D., New Vernon, NJ
James W. Winslow, M.D., Tarboro, NC
Kenneth H. Winter, M.D., Siler City, NC

CLASS OF 1976
Number in Class: 121
Percent Donors: 34%

Janet C. Aiken, M.D., Gastonia, NC
Warwick Aiken III, M.D., Gastonia, NC
Paul D. Barry, M.D., Greensboro, NC
Robyn W. Barst, M.D., Scarsdale, NY
Robert R. Bass, M.D., Annapolis, MD
Jean C. Bolan, M.D., Washington, DC
Alexis C. Bouteneff, M.D., Litchfield, CT
Richard A. Bowerman, M.D., Ann Arbor, MI
E. Christian Cameron, M.D., Atlanta, GA
Barbara J. Campbell, M.D., Somerset, PA
Marjorie B. Carr, M.D., Raleigh, NC
William H. Gamble, M.D., Greensboro, NC
Charles H. Hicks, M.D., Wrightsville Beach, NC
J. Lee Hoffer, M.D., Temple, TX
David H. Hopper, M.D., Princeton, WV
Billy R. Hunter, Sr., M.D., Worthington, OH
Robert H. Hutchins, M.D., Wilmington, NC
Ross D. Lynch, M.D., Columbia, SC
Sabra A. McNeill, M.D., Raleigh, NC
Bennett E. Mitchell, M.D., Las Vegas, NV
B. Douglas Morton III, M.D., Macon, GA
E. Paul Nance, Jr., M.D., Nashville, TN
L. Andrew Nassef, Jr., M.D., Danville, PA
David B. Neeland, M.D., Montgomery, AL
Harold A. Nichols, M.D., Greensboro, NC
Kathleen Gallagher Oxner, M.D., Greenville, SC
V. Edgar Paul, M.D., Greensboro, NC
Charles V. Pope, M.D., Apex, NC
Douglas C. Privette, M.D., Greenville, NC
Sheldon M. Retchin, M.D., Richmond, VA
Tamara L. Sanderson, M.D., Lexington, KY
Robert S. Shapiro, M.D., Athens, GA
David F. Silver, M.D., Charlottesville, VA
Linnea W. Smith, M.D., Chapel Hill, NC
Paul V. Stankus, M.D., Chapel Hill, NC
Robert J. Tallaksen, M.D., Morgantown, WV
F. Ray Thigpen, M.D., Whiteville, NC
Suzanne Tropez-Sims, M.D., Brentwood, TN
Nancy E. Wight, M.D., San Diego, CA
Richard L. Wing, M.D., Charlotte, NC
Solomon G. Zerden, M.D., Savannah, GA

CLASS OF 1977
Number in Class: 116
Percent Donors: 38%

Michael L. Barringer, M.D., Shelby, NC
Clinton A. Briley, Jr., M.D., Wilmington, NC
Francis S. Collins, M.D., Ph.D., Rockville, MD
Rafael F. Coutin, M.D., Corpus Christi, TX
Joseph E. Craft, M.D., Hamden, CT
Meyer E. Dworsky, M.D., Huntsville, AL
Randy S. Ellis, M.D., Spruce Pines, NC
Ronald J. Falk, M.D., Chapel Hill, NC
Wayne D. Fogle, M.D., Knoxville, TN
Arthur L. Fritz, M.D., Exmore, VA
William J. Fulkerson, Jr., M.D., Hillsborough, NC
J. Robert Goins, M.D., Hickory, NC
G. William Henry, M.D., Chapel Hill, NC
Marianna M. Henry, M.D., Chapel Hill, NC
Charles H. Hoover III, M.D., Monroe, NC
Elaine W. Huffman, M.D., Rockingham, NC
C. Frederick Irons III, M.D., Chapel Hill, NC
William L. Isley, M.D., Overland Park, KS
George M. Johnson, M.D., Charleston, SC
L. Lyndon Key, Jr., M.D., Hollywood, SC
Michael E. King, M.D., Winston-Salem, NC
Judith M. Kramer, M.D., Chapel Hill, NC
Frederick H. Mabry, Jr., M.D., Laurinburg, NC
William H. Marsh, M.D., Isle of Palms, SC
Stephen R. Mitchell, M.D., Alexandria, VA
Warren H. Moore, M.D., Sugar Land, TX
H. Grady Morgan, Jr., M.D., Wilmington, NC
Pamela A. Nelson, M.D., Raleigh, NC
Scott H. Norwood, M.D., Tyler, TX
Melinda C. Paul, M.D., Greensboro, NC
Ruth C. Penn, M.D., Ellicott City, MD
P. Lee Perkins, M.D., Shelby, NC
Michael L. Pool, M.D., Knoxville, TN
Duncan S. Postma, M.D., Tallahassee, FL
Robert B. Price, M.D., Marietta, GA
Catherine M. Radovich, M.D., Gallup, NM
Ronald W. Roberts, M.D., Greensboro, NC
William H. Ryan III, M.D., Dallas, TX
Samuel T. Selden, M.D., Chesapeake, VA
Howard J. Stang, M.D., Stillwater, MN
John H. Stanley, Jr., M.D., Wilmington, NC
Mathai S. Thomas, M.D., Burlington, NC
Richard H. Weisler, M.D., Raleigh, NC
Michael S. Wheeler, M.D., Rutherfordton, NC

CLASS OF 1978
Number in Class: 118
Percent Donors: 33%

Michael C. Alston, M.D., Murfreesboro, NC
James J. Bedrick, M.D., Charlotte, NC
John D. Benson, M.D., Cary, NC
Daniel J. Blake, M.D., Asheville, NC
Jane C. Burns, M.D., La Jolla, CA
Jean W. Carter, M.D., Raleigh, NC
Brian J. Cohen, M.D., Sudbury, MA
Paul W. F. Coughlin, M.D., High Point, NC
Betty J. Crosby, M.D., Charlotte, NC
Gregory L. Drake, M.D., Wilmington, NC
Allison J. Dudley, M.D., Charlotte, NC
George S. Edwards, Jr., M.D., Raleigh, NC
Martha L. Elks, M.D., Atlanta, GA
Don J. Fowls, M.D., Fairfax Station, VA
John B. Gordon III, M.D., La Jolla, CA
Sandra W. Gordon, M.D., Bakersfield, CA
Seth V. Hetherington, M.D., Chapel Hill, NC
Michael D. Holland, M.D., Rocky Mount, NC
Wade L. Lowry, M.D., Colleyville, TX
Jeffrey A. Margolis, M.D., Tappahannock, VA
Carol A. Martin, M.D., Raleigh, NC
John T. McElveen, Jr., M.D., Raleigh, NC
A. Price Monds, M.D., Hertford, NC
Mark D. Monson, M.D., Spartanburg, SC
James E. Nicholson III, M.D., Cary, NC
Michael Y. Parker, M.D., Raleigh, NC
Peter A. Schlesinger, M.D., St. Paul, MN
Stuart C. Segerman, M.D., Atlanta, GA
Susan T. Snider, M.D., Spruce Pine, NC
Alan D. Stiles, M.D., Chapel Hill, NC
Nancy L. Teaff, M.D., Charlotte, NC
Barry H. Teasley, M.D., Goldsboro, NC
Gregory H. Tuttle, M.D., Chapel Hill, NC
William A. Walker, M.D., Charlotte, NC
J. Byron Walthall, Jr., M.D., Charlotte, NC
David M. Warshauer, M.D., Chapel Hill, NC
Larry A. Wilson, M.D., Baldwin, MD

Luisa L. Wilson, M.D., Mount Mourne, NC
Richard C. Worf, M.D., Winston-Salem, NC

CLASS OF 1979
Number in Class: 126
Percent Donors: 29%

Andrew H. Balder, M.D., Longmeadow, MA
Charles H. Barrier, M.D., Greenville, NC
H. Robert Brashear III, M.D., Pennington, NJ
Gail M. Capel, M.D., Oak Island, NC
W. Hugh Craft, Jr., M.D., Roanoke, VA
Walter E. Daniel, Jr., M.D., Raleigh, NC
Douglas M. Delong, M.D., Cherry Valley, NY
F. Andrew Dorr, M.D., Solana Beach, CA
Elizabeth A. Eagle, M.D., Greensboro, NC
Ellen B. Fitzgerald, M.D., Versailles, KY
Sharon M. Foster, M.D., Raleigh, NC
Anne T. Keifer, M.D., Chapel Hill, NC
John C. Keifer, M.D., Chapel Hill, NC
John M. Lafferty, M.D., Valdese, NC
Alfred B. Little, M.D., Greensboro, NC
Darlyne Menscer, M.D., Charlotte, NC
Lawrence H. Pearson, M.D., Shelby, NC
James G. Peden, Jr., M.D., Greenville, NC
Thomas B. Prebble, M.D., Marshfield, WI
Charles N. Reed, M.D., Hickory, NC
J. Mark Rowles, M.D., Atlanta, GA
James L. Sanderford, Jr., M.D., Lewisville, NC
M. Catherine Schumacher, M.D., Anchorage, AK
William L. Stewart, M.D., Southern Pines, NC
Frances R. Thomas, M.D., Chicago, IL
Douglas B. Thomson, M.D., Bowling Green, KY
Paul A. Vadnais, M.D., Charlotte, NC
Lynn E. Wesson, M.D., Chapel Hill, NC
Anita S. Westafer, M.D., Gulf Breeze, FL
John M. Westafer, M.D., Gulf Breeze, FL
Mack W. White III, M.D., Charlotte, NC
C. Phillip Whitworth, M.D., Forest City, NC
Larry T. Williams, M.D., Hickory, NC
R. Stanford Williams, M.D., Gainesville, FL
Leonard S. Wojnowich, M.D., Savannah, GA
Norman F. Woodlief, M.D., Cedar Falls, IA

CLASS OF 1980
Number in Class: 154
Percent Donors: 30%

John A. Ascher, M.D., Durham, NC
Paul J. Befanis, M.D., Melbourne, FL
Edward H. Bertram III, M.D., Charlottesville, VA
Marcus E. Carr, Jr., M.D., Midlothian, VA
Wilbur B. Carter, Jr., M.D., Chapel Hill, NC
Lauren E. Cosgrove, M.D., Potomac, MD
Ernest B. Eason, M.D., Burlington, NC
Patricia T. Edkins, M.D., Chapel Hill, NC
W. L. Wells Edmundson, M.D., Raleigh, NC
Walter E. Egerton III, M.D., Bel Air, MD
C. O'Neil Ellis, M.D., Matthews, NC
Jackson V. Gibson, M.D., Southern Pines, NC
Mitchell D. Hardison, M.D., Raleigh, NC
M. Linda Hawes, M.D., Rocky Mount, NC
Carl L. Haynes, Jr., M.D., Kinston, NC
J. Patrick Holland, M.D., Winston-Salem, NC
Douglas K. Holmes, M.D., Raleigh, NC
Konrad C. Kaltenborn, M.D., Anchorage, AK
Janice D. Key, M.D., Hollywood, SC
Daniel M. Lewis, M.D., Charlotte, NC
Thomas H. Lineberger, M.D., Pinehurst, NC
Jimmy Locklear, M.D., Raleigh, NC
William L. Lowe, Jr., M.D., Winnetka, IL
Christine C. Mahvi, M.D., Middleton, WI
E. John Markushewski, Jr., M.D., Huntsville, AL
Steven K. McCombs, M.D., Chapel Hill, NC
J. Eugene McMurry, Jr., M.D., Wilmington, NC
Gordon E. Melville, M.D., Basking Ridge, NJ
Linda M. Mohr, M.D., Raleigh, NC
T. Michael O'Shea, Jr., M.D., Winston-Salem, NC
Cort A. Pedersen, M.D., Chapel Hill, NC
Timothy A. Presnell, M.D., Richlands, VA
E. Jacqueline Prince, M.D., Memphis, TN
Petrie M. Rainey, M.D., Lake Forest Park, WA
Judith L. Rissman, M.D., Lexington, MA
Barry R. Schneider, M.D., Charlotte, NC
Andrew M. Singer, M.D., Lincoln, MA
James P. Srebro, M.D., Napa, CA
Walter J. Steele, M.D., Charlotte, NC
James V. Taylor III, M.D., Wilson, NC
Benjamin D. Thomas, Jr., M.D., Atlanta, GA
Donna W. Tilson, M.D., Louisville, KY
Jonathan P. Tolins, M.D., Minneapolis, MN
Timothy A. Viser, M.D., Cleveland, TN
Liliana G. Visscher, M.D., Cape Girardeau, MO
Jerry W. Withrow, M.D., Charlotte, NC

CLASS OF 1981
Number in Class: 152
Percent Donors: 37%

G. Williams Adams, M.D., Severna Park, MD
Lee P. Adler, M.D., Jenkintown, PA
Paul S. Andrews, M.D., Chapel Hill, NC
Richard L. Auten, Jr., M.D., Chapel Hill, NC
Elizabeth S. Babcox, M.D., Shaker Heights, OH
David S. Barnes, M.D., Shaker Heights, OH
Craig R. Bennett, M.D., Wilkesboro, NC
Kenneth R. Blau, M.D., Sarasota, FL
Stephen E. Buie, M.D., Asheville, NC
Graham W. Bullard, M.D., Cornelius, NC
David M. Cowherd, M.D., Pinehurst, NC
David A. Crews, M.D., Greensboro, NC
Susan L. Crittenden, M.D., Cary, NC
Deborah H. Davis, M.D., Morganton, NC
David M. Deitz, M.D., Steilacoom, WA
Amelia F. Drake, M.D., Chapel Hill, NC
Willie S. Edwards, Jr., M.D., Florence, SC
Miriam C. Gardner, M.D., Iowa City, IA
Kathryn T. George, M.D., Towson, MD
David A. Goff, M.D., Raleigh, NC
Terry R. Gordon, M.D., Detroit, MI
Billy A. F. Hammond, M.D., Cape Girardeau, MO
David K. Harper, M.D., Concord, NC
William M. Herndon, Jr., M.D., Charlotte, NC
Edward K. Isbey III, M.D., Asheville, NC
G. Wallace Kernodle, Jr., M.D., Burlington, NC
Douglas P. Kiel, M.D., Medfield, MA
Young H. Kim, M.D., Princeton, NJ
Leigh S. Lehan, M.D., Raleigh, NC
Robert E. Littleton, M.D., Raleigh, NC
Jane E. Lysko, M.D., Asheville, NC
Saundra A. Maass-Robinson, M.D., East Point, GA
William H. Merwin, Jr., M.D., Knoxville, TN
Charles B. Nemeroff, M.D., Ph.D., Atlanta, GA
J. Thomas Newton, M.D., Clinton, NC
Larry C. Nickens, M.D., Goldsboro, NC
Paul M. Parker, M.D., Atlanta, GA
Ruth M. Parker, M.D., Atlanta, GA
Herbert O. Phillips IV, M.D., Asheville, NC
John B. Plonk, Jr., M.D., Charlotte, NC
Edward T. Plyler, M.D., Morganton, NC
Larry B. Poe, M.D., Binghamton, NY
Scott L. Ramey, M.D., Lynn Haven, FL
Anne Marie A. Riether, M.D., Peachtree City, GA
Teresa A. Rummans, M.D., Rochester, MN
John W. Sanders III, M.D., Wilmington, NC
Timothy G. Saunders, M.D., Charlotte, NC
Thomas J. Seely, M.D., Summerfield, NC
Jeannette F. Stein, M.D., Durham, NC
Elwood E. Stone, Jr., M.D., Cedar Rapids, IA
William W. Stuck, M.D., Columbia, SC
Ronald M. Walters, M.D., Whiteville, NC
James D. Whinna, M.D., Monroe, NC
Lena White-Butterworth, M.D., Charlotte, NC
Warden L. Woodard III, M.D., Charlotte, NC
Richard B. Yow, M.D., Clemmons, NC

CLASS OF 1982
Number in Class: 146
Percent Donors: 28%

Joseph L. Albright, Jr., M.D., Charlotte, NC
Mary John Baxley, M.D., Greensboro, NC
Barbara L. Bethea, M.D., Lillington, NC
J. Lawrence Brady, Jr., M.D., Charlotte, NC
Dennis N. Casey, M.D., Kinston, NC
David W. Cash, M.D., Statesville, NC
Louisa E. Chapman, M.D., Atlanta, GA
Nancy C. Chescheir, M.D., Chapel Hill, NC
Catherine Chiles, M.D., Hamden, CT
Reese H. Clark, M.D., Weston, FL
Rick J. Cornella, M.D., Boone, NC
Bruce V. Darden II, M.D., Charlotte, NC
Cindy S. Dieringer, M.D., Camden, SC
Steven A. Dingeldein, M.D., Burlington, NC
David S. Enterline, M.D., Raleigh, NC
Lawrence M. Fleishman, M.D., Charlotte, NC
John S. Gaul III, M.D., Charlotte, NC
Thomas W. Graham, M.D., Chapel Hill, NC
Sarah W. Hudson, M.D., Elizabeth City, NC
Stephen M. Hux, M.D., Winston-Salem, NC
Timothy O. Jenkins, M.D., Concord, NC
Beverly N. Jones III, M.D., Winston-Salem, NC
Virginia E. Killough, M.D., Marquette, MI
Barbara A. King, M.D., Bakersville, NC
Wade H. King, M.D., San Francisco, CA
Marian S. Kirkman, M.D., Carmel, IN
Vincent J. Kopp, M.D., Edenton, NC
Mary T. Korytkowski, M.D., Pittsburgh, PA
Jackie A. Lucas, M.D., Charlotte, NC
James T. Massagee, M.D., Greensboro, NC
David W. McMurry, M.D., Concord, NC
Linville M. Meadows, M.D., Jacksonville, FL

Carl D. Pate, Jr., M.D., Beulaville, NC
Donald W. Peters, M.D., Winston-Salem, NC
Betsy C. Phillips, M.D., Asheville, NC
Jennifer C. Schaal, M.D., Greensboro, NC
David A. Tate, M.D., Chapel Hill, NC
Anne G. Tyson, M.D., Lakeland, FL
Eric D. Van Tassel, M.D., Asheville, NC
Stanley A. Wilkins, Jr., M.D., Raleigh, NC
Fred H. Wilson, M.D., Greensboro, NC

CLASS OF 1983
Number in Class: 156
Percent Donors: 36%

William F. Alexander, M.D., Chapmansboro, TN
John W. Bartlett, M.D., Greensboro, NC
Thomas W. Benton, M.D., Charlotte, NC
James A. Bryan III, M.D., Chapel Hill, NC
Aubrey D. Calhoun, M.D., Mooresville, NC
Donald W. Carringer, M.D., Newland, NC
Ralph S. Christy, Jr., M.D., Concord, NC
Douglas W. Clark, M.D., Chapel Hill, NC
R. Carter Clements, M.D., Oakland, CA
Thomas C. Darrell, M.D., Fuquay-Varina, NC
Phillip S. Dickey, M.D., New Haven, CT
Jessie W. DiNome, M.D., Philadelphia, PA
Pamela S. Dockery-Howard, M.D., Clemmons, NC
Mary Anne Dooley, M.D., Chapel Hill, NC
James L. Everette, Jr., M.D., Dover, DE
Michael B. Fischer, M.D., Glastonbury, CT
Patricia A. Friedman, M.D., Chevy Chase, MD
Robert L. Green, Jr., M.D., Lynchburg, VA
Timothy J. Hall, M.D., Rock Hill, SC
Kimberly S. Haltiwanger, M.D., Setauket, NY
Clyde L. Harris, M.D., Wilmington, NC
Robert N. Headley, Jr., M.D., Lynchburg, VA
John M. Herion, M.D., Wilmington, NC
David M. Huffman, M.D., Chattanooga, TN
Thomas T. Hunter, M.D., Jacksonville, NC
Mark W. Jacokes, M.D., Nashville, TN
Barbara E. Johnston, M.D., New York, NY
Gary C. Jones, M.D., Greenville, NC
James D. Ladd, M.D., Asheville, NC
Peter J. Larson, M.D., Raleigh, NC
Franklin W. Maddux, M.D., Danville, VA
Claude McFarlane, M.D., Chapel Hill, NC
Barbara B. McPherson, M.D., Greensboro, NC
Paula F. Miller, M.D., Chapel Hill, NC
Paul L. Molina, M.D., Chapel Hill, NC
Margaret N. Morris, M.D., Asheville, NC
Jackie A. Newlin-Saleeby, M.D., Raleigh, NC
James C. Osborne, M.D., Greensboro, NC
Catherine A. Parrish, M.D., Ellicott City, MD
Gary T. Podgorski, M.D., Columbia, TN
Woodrow W. Reeves, Jr., M.D., Kingsport, TN
George A. Scharyj, M.D., Tucker, GA
Lisa L. Shockley, M.D., Kingsport, TN
Barbara H. Smith, M.D., Greensboro, NC
Hermon W. Smith III, M.D., West Friendship, MD
Eugene R. Soares, M.D., Dover, NH
C. Stephen Stinson, M.D., Winston-Salem, NC
Paul B. Suh, M.D., Durham, NC
Claudia J. Svara, M.D., Raleigh, NC
Richard S. Sykes, M.D., Hillsborough, NC
Deborah L. Tussing, M.D., Severna Park, MD
Gregory A. Underwood, M.D., Charlotte, NC
Mary C. Wasko, M.D., Pittsburgh, PA
John H. Williams, M.D., Raleigh, NC
Gail S. Wright, M.D., Savannah, GA
Lawrence M. Wyner, M.D., Charleston, WV

CLASS OF 1984
Number in Class: 136
Percent Donors: 36%

James P. Alexander, Jr., M.D., Decatur, GA
Jay A. Anderson, M.D., Sumter, SC
Kathryn G. Bailey, M.D., Pittsford, NY
Walter B. Beaver, Jr., M.D., Charlotte, NC
Lynn Black, M.D., Concord, MA
W. Kent Davis, M.D., Raleigh, NC
Alain T. Drooz, M.D., Vienna, VA
Kevin O. Easley, M.D., St. Louis, MO
Charles L. Ewell, Jr., M.D., New Albany, OH
Eli D. Finkelstein, M.D., Edison, NJ
Michael E. Garfinkel, M.D., Eugene, OR
Thomas T. Giduz, M.D., Chapel Hill, NC
Charles C. Goodno, M.D., Carrboro, NC
Margaret L. Gulley, M.D., Chapel Hill, NC
Ronald P. Hargrave, M.D., Mt. Pleasant, SC
James R. Harper, Jr., M.D., Wilmington, NC
J. Carver Hill, M.D., Cary, NC
Janice R. Hossler, M.D., Prosperity, SC
Linda E. Jaffe, M.D., Wilton, CT
Michael J. Knight, M.D., North Hampton, NH
Elizabeth W. Koonce, M.D., Charlotte, NC
Sarah S. Kratz, M.D., Raleigh, NC
Joel D. Lilly, M.D., Seattle, WA
Robert P. Lineberger, M.D., Chapel Hill, NC
Dugan W. Maddux, M.D., Danville, VA
Jane H. Murray, M.D., Durham, NC
Howard W. Newell, Jr., M.D., Goldsboro, NC
R. Claiborne Noble, M.D., Raleigh, NC
Joseph M. Payne, Jr., M.D., Wilmington, NC
Ronald E. Pruitt, M.D., Nashville, TN
M. Barry Randall, M.D., Memphis, TN
Alfred L. Rhyne III, M.D., Charlotte, NC
Richard G. Saleeby, Jr., M.D., Raleigh, NC
David L. Sappenfield, M.D., Durham, NC
Paul W. Sasser, M.D., Eden, NC
Mary A. Saunders, M.D., Springfield, IL
John M. Schoffstall, M.D., Glen Mills, PA
David E. Sorenson, M.D., Newburyport, MA
Thomas C. Spangler, M.D., Winston-Salem, NC
Sharon R. Stephenson, M.D., Cary, NC
Richard C. Stuntz, Jr., M.D., Lake Wylie, SC
Jean G. Taylor, M.D., Greensboro, NC
Paul E. Viser, M.D., Clinton, NC
Robert A. Wainer, M.D., Greensboro, NC
Ellen C. Wells, M.D., Cary, NC
Robert E. Wiggins, Jr., M.D., Asheville, NC
John W. Williams, Jr., M.D., Chapel Hill, NC
Phyllis M. Woodring, M.D., West Chesterfield, NH
Michael N Zarzar, M.D., Chapel Hill, NC

CLASS OF 1985
Number in Class: 150
Percent Donors: 37%

Judith F. Aronson, M.D., Galveston, TX
S. Leonard Auman, Jr., M.D., Dallas, TX
William H. Billica, M.D., Glendale, AZ
Leslie A. Bunce, M.D., Chapel Hill, NC
Jay C. Butler, M.D., Anchorage, AK
Kathleen M. Clarke-Pearson, M.D., Chapel Hill, NC
Susan L. Cookson, M.D., Stone Mountain, GA
Douglas S. Diekema, M.D., Kenmore, WA
Cynthia B. Dunham, M.D., Greensboro, NC
Douglas S. Feltman, M.D., Coral Gables, FL
Kenneth E. Ferrell, Jr., M.D., Charlotte, NC
Margaret K. Fikrig, M.D., Guilford, CT
Catherine G. Fuller, M.D., Los Angeles, CA
Valda O. Gibson, M.D., Atlanta, GA
John H. Gilmore, Jr., M.D., Chapel Hill, NC
W. Scott Haddon, M.D., Raleigh, NC
Charles A. Harper, Jr., M.D., Greensboro, NC
Charles S. Hayek, M.D., Shelby, NC
Michael A. Hertzberg, M.D., Durham, NC
David V. Z. Janeway, M.D., Winston-Salem, NC
Brentley D. Jeffries, M.D., Asheville, NC
Margaret G. Johnson, M.D., Chapel Hill, NC
David C. Joslin, M.D., Greensboro, NC
Theodore C. Kerner, Jr., M.D., Lewisville, NC
John A. Kirkland, Jr., M.D., Charlotte, NC
Mark H. Knelson, M.D., Durham, NC
Frederick W. Lawler, Jr., M.D., Chapel Hill, NC
Laura L. Lomax, M.D., Greensboro, NC
Frank A. Luzzi, M.D., Torrington, CT
Elizabeth E. Mandell, M.D., Lakeville, MN
James E. Manning, M.D., Hillsborough, NC
Elizabeth S. McCuin, M.D., Roanoke, VA
Gwenn E. McLaughlin, M.D., Coral Gables, FL
Nancy H. Miller, M.D., Longmeadow, MA
Stephen B. Mitchell, M.D., Morehead, KY
Terry A. Morrow, M.D., West Linn, OR
Terrence D. Morton, Jr., M.D., Mooresville, NC
Robert F. Murray III, M.D., Pleasant Ridge, MI
Leslie K. Paulus, M.D., Phoenix, AZ
Janice L. Rea, M.D., Lawrenceville, GA
Michael L. Russell, M.D., Durham, NC
Joel E. Schneider, M.D., Raleigh, NC
Martin E. Sheline, M.D., Atlanta, GA
McCrae S. Smith, M.D., Greensboro, NC
Beverly G. Stigall, M.D., Greenville, SC
S. Patrick Stuart, Jr., M.D., Winston-Salem, NC
Claudia L. Thomas, M.D., Sands Point, NY
Dorothy E. Thomas, M.D., Louisville, KY
Howard S. Tuch, M.D., Tampa, FL
Thomas A. Vassiliades, Jr., M.D., Gulf Breeze, FL
David H. Viskochil, M.D., Salt Lake City, UT
James A. Wainer, M.D., Raleigh, NC
Bradley K. Weisner, M.D., Charlotte, NC
Randall W. Williams, M.D., Raleigh, NC
Kerry A. Willis, M.D., Morehead City, NC
Sherrie E. Zweig, M.D., Chapel Hill, NC

CLASS OF 1986
Number in Class: 145
Percent Donors: 28%

Andrew S. Blum, M.D., Chicago, IL
R. Dean Butler, M.D., Charlotte, NC
Mark A. Callahan, M.D., New York, NY
James W. Cheek, M.D., Jacksonville, FL
Hersh Chopra, M.D., Atlanta, GA
Elizabeth T. Clark, M.D., Chicago, IL
William M. Clark, Jr., M.D., Oak Park, IL
Jennifer P. Coursen, M.D., Seattle, WA
Herbert G. Garrison III, M.D., Greenville, NC
Lynne C. Garrison, M.D., Greenville, NC
Elizabeth V. Getter, M.D., New York, NY
David C. Goff, Jr., M.D., Winston-Salem, NC
Pamela G. Hanna, M.D., Cornelius, NC
J. Curtis Jacobs, M.D., High Point, NC
Kim R. Jones, M.D., Ph.D., Carrboro, NC
Rebecca S. Kennedy, M.D., Graham, NC
Patricia C. LaRocco, M.D., Fair Lawn, NJ
Jonathan K. Levine, M.D., Charlotte, NC
Jennifer G. Levitt, M.D., Encino, CA
Sidney Mallenbaum, M.D., Virginia Beach, VA
Leslie C. McKinney, M.D., Raleigh, NC
Al L. Melvin, M.D., Wilson, NC
Michael R. Miller, M.D., Statesville, NC
Michael E. Norins, M.D., M.P.H., Greensboro, NC
Debra B. Novotny, M.D., Wilmington, NC
Anne D. Oakley, M.D., Spokane, WA
Steven R. Olson, M.D., Greensboro, NC
William G. Price, M.D., Radford, VA
Wayne R. Rackoff, M.D., Weston, FL
Grayson K. Rodgers, M.D., Birmingham, AL
James G. Ross, M.D., Chapel Hill, NC
Tobias Schifter, M.D., Tempe, AZ
C. Wilson Sofley, Jr., M.D., Anderson, SC
Cathy Jo W. Swanson, M.D., Roanoke, VA
Deborah T. Wadsworth, M.D., Des Peres, MO
L. Tyler Wadsworth III, M.D., Des Peres, MO
Calvin G. Warren, Jr., M.D., New Bern, NC
Oscar J. Webb, M.D., Merritt Island, FL
James C. Womble, M.D., Cary, NC
Nicholas S. Zarzar, M.D., Hillsborough, NC

CLASS OF 1987
Number in Class: 151
Percent Donors: 44%

Melisa M. Agness, M.D., Radford, VA
Linda R. Belhorn, M.D., Chapel Hill, NC
Thomas H. Belhorn, M.D., Ph.D., Chapel Hill, NC
John M. Bennett, M.D., Forest City, NC
William S. Blau, M.D., Ph.D., Chapel Hill, NC
David W. Boone, M.D., Raleigh, NC
Melissa W. Burch, M.D., Orono, ME
Lisa A. Christman, M.D., Raleigh, NC
Charles J. Chung, M.D., Charlottesville, VA
Gregor G. Cleveland, M.D., Ph.D., Timmonsville, SC
David A. Coggins, M.D., Pennsylvania Furnace, PA
James B. Collawn, M.D., Raleigh, NC
Carey G. Cottle, Jr., M.D., Greensboro, NC
Lochrane G. Davids, M.D., Greenville, SC
Miriam H. DeLyon, M.D., Newbury Park, CA
I. Gordon Early, Jr., M.D., Spartanburg, SC
James E. Edwards, M.D, Isle of Palms, SC
Lee A. Furlong, M.D., Seal Rock, OR
Ruth E. Gettes, M.D., Tampa, FL
Andrea N. Hass, M.D., North Palm Beach, FL
J. Franklin Hatchett, Jr., M.D., Summerfield, NC
Richard H. Havunjian, M.D., Los Angeles, CA
Darrell E. Hester, M.D., Wilmington, NC
Holly A. Hill, M.D., Ph.D., Decatur, GA
Albert R. Hinn, Jr., M.D., Chapel Hill, NC
James P. Hooten, Jr., M.D., Elon, NC
R. Page Hudson III, M.D., Williston, VT
Dennis N. Jacokes, M.D., Raleigh, NC
R. Lee Jobe, M.D., Raleigh, NC
J. Gregory Kaufmann, M.D., Salisbury, NC
William W. King, M.D., Wilmington, NC
David A. Klein, M.D., Chapel Hill, NC
Thomas E. Lawrence, M.D., Greensboro, NC
Susan R. Leivy, M.D., Roanoke, VA
William J. Leland, M.D, Tarboro, NC
Catherine K. Lineberger, M.D., Chapel Hill, NC
Julia O. Lunsford, M.D., Raleigh, NC
Gustav C. Magrinat, M.D., Greensboro, NC
T. Fleming Mattox, M.D., Greenville, SC
Cary C. McDonald, M.D., Chapel Hill, NC
Teresa B. Melvin, M.D., Mooresville, NC
Douglas E. Mesler, M.D., Andover, MA
Sherry L. Morris, M.D., Harrisonburg, VA
Frances A. Owl-Smith, M.D., Waynesville, NC
John Perl II, M.D., Edina, MN
John M. Petitto, M.D., Gainesville, FL
Virginia B. Petitto, M.D., Gainesville, FL
Nancy W. Phifer, M.D., Greensboro, NC
Lisle N. Reynolds, M.D., Birmingham, AL
Mark K. Robbins, M.D., Charlottesville, VA
Joseph E. Roberts, Jr., M.D., Pembroke, NC
David B. Robinson, M.D., M.P.H., Auke Bay, AK
John R. Saltzman, M.D., Westborough, MA
Daniel M. Sappenfield, M.D., Charlotte, NC
Marc S. Schwartzberg, M.D., Mount Dora, FL
Constance J. Sewell, M.D., Asheville, NC
Ronald B. Shapiro, M.D., Austin, TX
Stephanie E. Spottswood, M.D., Midlothian, VA
Eve G. Spratt, M.D, Isle of Palms, SC
Robyn L. Stacy-Humphries, M.D., Charlotte, NC
Brian S. Strauss, M.D., High Point, NC
William R. Sutton, M.D., Wilmington, NC
Quang T. Tran, M.D., Lynn Haven, FL
Robert M. Walasin, M.D., Chapel Hill, NC
Jonathan J. Weiner, M.D., Durham, NC
Paul A. Young, M.D., APO, AP

CLASS OF 1988
Number in Class: 149
Percent Donors: 34%

Roc W. Bauman, M.D., Concord, NC
Jon P. Brisley, M.D., Roanoke, VA
Brenton T. Burkholder, M.D., Dulles, VA
J. Blair Butler, M.D., Columbia, TN
Maura L. Campbell, M.D., Murfreesboro, TN
J. Craig Charles, M.D., Rock Hill, SC
Karen A. Coates, M.D., Cary, NC
Peter G. Dalldorf, M.D., Greensboro, NC
Margie B. Eason, M.D., Martinsville, VA
Paul R. Eason, M.D., Martinsville, VA
C. Gaelyn Garrett, M.D., Nashville, TN
Kirsten G. Girkins, M.D., Charlotte, NC
Elizabeth H. Hamilton, M.D., Chapel Hill, NC
Hunter A. Hoover, M.D., Charlotte, NC
Sally S. Ingram, M.D., Chapel Hill, NC
Allison L. Jacokes, M.D., Raleigh, NC
C. David Johnson, M.D., Blythewood, SC
Asha R. Kallianpur, M.D., Nashville, TN
Kathryn P. King, M.D., Carrboro, NC
Hannah R. Krigman, M.D., St. Louis, MO
Ritsu Kuno, M.D., Midlothian, VA
Jane M. Laco, M.D., Plymouth, MN
Rayman W. Lee, M.D., Kemah, TX
Stuart J. Levin, M.D., Raleigh, NC
Bobby K. McCullen, Jr., M.D., Belmont, NC
William S. McMahon, Jr., M.D., Homewood, AL
Catherine L. Munson, M.D., Fort Mill, SC
Philip J. Nahser, Jr., M.D., Greensboro, NC
Andrew S. Neish, M.D., Atlanta, GA
Charles E. Parke, M.D., Greenville, SC
Mahrad Paymani, M.D., Leesburg, FL
Marjorie D. Paymani, M.D., Leesburg, FL
John E. R. Perry III, M.D., Raleigh, NC
Scott M. Petty, M.D., Franklin, NC
Elizabeth A. Pryor, M.D., Johnson City, TN
Gail E. Quackenbush, M.D., Leonia, NJ
Cecelia B. Ramsey, M.D., Charlotte, NC
Jacquelyn L. Redd, M.D., Silver Spring, MD
Jeffrey E. Roller, M.D., Morganton, NC
George H. S. Sanders, M.D., Jamestown, NC
Charles D. Scheil, M.D., Hickory, NC
J. Robert Silver, M.D., Charlotte, NC
Mary F. Smith, M.D., Chapel Hill, NC
Daniel J. Stackhouse, M.D., Charlotte, NC
Kassell E. Sykes, M.D., Raleigh, NC
John D. Symanski, M.D., Charlotte, NC
Spyro P. Vulgaropulos, M.D., Cary, NC
Edward W. Whitesides, M.D., Wilmington, NC
Elliott F. Williams, M.D., High Point, NC
Jean P. Zula, M.D., Durham, NC

CLASS OF 1989
Number in Class: 142
Percent Donors: 25%

Paul E. Austin, M.D., Durham, NC
Melva R. Bowman, M.D., Rockingham, NC
Christopher Bullock, M.D., Alpena, MI
Lisa K. Burke, M.D., Marietta, GA
Peter N. Copsis, M.D., Matthews, NC
Brenda K. Cowell, M.D., Charlotte, NC
Gwen L. David, M.D., Livingston, NJ
Betsy M. English, M.D., Winston-Salem, NC
Daniel T. Goulson, M.D., Lexington, KY
Michael Gruenthal, M.D., Louisville, KY
Douglas B. Hansen, M.D., Rock Hill, SC
W. Randall Harris IV, M.D., Greensboro, NC
Mary E. Hebert, M.D., Denison, TX
David E. Hoyle, M.D., D.D.S., Chapel Hill, NC
Rosemary Jackson, M.D., Bahama, NC
Daniel M. Kaplan, M.D., Durham, NC
William H. Kelly, M.D., Fayetteville, NC
William L. Lawing, M.D., Winston-Salem, NC
Lisa S. Leland, M.D., Tarboro, NC
Kenneth S. Maxwell, M.D., Winston-Salem, NC
Christopher D. McKinney, M.D., Kingsport, TN
James M. McLean, M.D., Winston-Salem, NC
Melissa M. McLeod, M.D., Norfolk, VA
Jay B. Michael, M.D., High Point, NC
H. Merle Miller, M.D., Boulder, CO

Yolanda V. Scarlett, M.D., Hillsborough, NC
Mary D. Shearin, M.D., Jamestown, NC
Arthur J. Shepard III, M.D., North Charleston, SC
G. Bradley Sherrill, M.D., Greensboro, NC
J. Daniel Singer, M.D., Greensboro, NC
Patricia G. Singer, M.D., Greensboro, NC
James J. Walsh, M.D., Morganton, NC
Lorna A. Westfall, M.D., APO, AE
Barton G. Williams, M.D., Wilmington, NC
Jon P. Woods, M.D., Madison, WI
Wendell G. Yarbrough, M.D., Nashville, TN

CLASS OF 1990
Number in Class: 146
Percent Donors: 36%

Amina Ahmed, M.D., Charlotte, NC
Teresa T. Anderson, M.D., Albuquerque, NM
John T. Atkins III, M.D., Evans, GA
Lori W. Balaban, M.D., Charlottesville, VA
John E. Barkley, M.D., Charlotte, NC
Ronnie J. Barrier, M.D., Salisbury, NC
L. Lorraine Basnight, M.D., Greenville, NC
Elizabeth D. Bell, M.D., Chapel Hill, NC
Robert M. Bernstein, M.D., Seattle, WA
Anna P. Bettendorf, M.D., Durham, NC
Cedric M. Bright, M.D., Durham, NC
Betsy E. Brown, M.D., Seattle, WA
Victor M. Caceres, M.D., Atlanta, GA
Martyn J. Cavallo, M.D., Nashville, TN
Scott M. Cochrane, M.D., Amherst, MA
Catherine L. Cooper, M.D., Richmond, VA
Edward M. Cox, Jr., M.D., Kensington, MD
C. James Cummings, M.D., Asheville, NC
Julia L. Danek, M.D., Chapel Hill, NC
Barry T. Degregorio, M.D., Portland, OR
Jon P. Donnelly, M.D., Cape Elizabeth, ME
Thomas E. Edwards, Jr., M.D., Atlanta, GA
Robert R. Ehinger, M.D., Greensboro, NC
Amy S. Ende, M.D., Marion, NC
John W. C. Entwistle III, M.D., Lafayette Hill, PA
Mary I. Fatehi, M.D., Englewood, NJ
Vanessa A. Fenner, M.D., Silver Spring, MD
Virginia W. Gale, M.D., Saluda, VA
Keith E. Griffin, M.D., Concord, NC
Susan J. Hardesty, M.D., Mount Pleasant, SC
Martin M. Henegar, M.D., Charlotte, NC
Stacey N. Ibrahim, M.D., Asheville, NC
Dominic A. Jaeger, M.D., Brandon, MS
Marion C. Johnson, M.D., Bellevue, WA
Leigh H. Jones, M.D., Greensboro, NC
Catherine C. Kapoor, M.D., Gilbert, AZ
Philip C. Lackey, M.D., Charlotte, NC
Harrison A. Latimer, M.D., Kinston, NC
Lori B. Lilley, M.D., Raleigh, NC
Wanda K. Nicholson, M.D., Columbia, MD
Lawrence R. Nycum, M.D., Winston-Salem, NC
Steven F. Parker, M.D., Hamilton, VA
Philip W. Ponder, M.D., Winston-Salem, NC
Gregory D. Randolph, M.D., Chapel Hill, NC
Whitman L. Reardon, M.D., Chapel Hill, NC
Pamela J. Reitnauer, M.D., Greensboro, NC
J. Gardiner Roddey, Jr., M.D., Charlotte, NC
Patricia K. Roddey, M.D., Charlotte, NC
Eugenia B. Smith, M.D., Chapel Hill, NC
T. Scott Stroup, M.D., Chapel Hill, NC
Murphy F. Townsend III, M.D., Atlanta, GA
John H. Wood, M.D., Chapel Hill, NC
Humayun I. Zeya, M.D., McLean, VA

CLASS OF 1991
Number in Class: 144
Percent Donors: 29%

Carrie D. Alspaugh, M.D., Morrisville, NC
Katrina H. Avery, M.D., Durham, NC
Mack N. Barnes III, M.D., Birmingham, AL
Robert C. Brooks, M.D., Pittsburgh, PA
N. Elaine Broskie, M.D., Salem, OR
Elizabeth D. Brown, M.D., Summerfield, NC
Robert L. Cook, M.D., Pittsburgh, PA
William W. Crone, M.D., Atlanta, GA
Megan M. Davies, M.D., Raleigh, NC
C. Neill Epperson, M.D., North Haven, CT
Tiffany S. Flanagan, M.D., Raleigh, NC
Thalia B. Forte, M.D., Desoto, TX
Samuel C. Franklin, Jr., M.D., North Charleston, SC
Catherine M. Gordon, M.D., Wellesley, MA
Brian H. Hamilton, M.D., Charlotte, NC
Parlyn T. Hatch, M.D., Ormond Beach, FL
Robert S. Hatch, M.D., Ormond Beach, FL
Leon W. Herndon, Jr., M.D., Hillsborough, NC
W. Barlow Inabnet III, M.D., New York, NY
Drew A. Jones, M.D., Greensboro, NC
Crystal D. Katz, M.D., Cary, NC
Seth E. Katz, M.D., Cary, NC
W. Evans Kemp, Jr., M.D., Nashville, TN
Helene P. Keyzer-Pollard, M.D., Gastonia, NC
Valerie J. King, M.D., Carrboro, NC
Carol B. Kirschenbaum, M.D., Durham, NC
Michele C. Larson, M.D., Goldsboro, NC
Esther J. Lee, M.D., Wagram, NC
Constantine G. Marousis, M.D., Sarasota, FL
Thomas L. Mason, M.D., Cornelius, NC
Scott R. McDuffie, M.D., Sumter, SC
Bryan R. Neuwirth, M.D., Hickory, NC
Carroll C. Overton, M.D., Raleigh, NC
Vincent C. Phillips, M.D., Englewood, OH
Richard J. Pollard, M.D., Gastonia, NC
Amy J. Robbins, M.D., Charlotte, NC
C. Anthony Staley, M.D., Skowhegan, ME
Todd F. Tanner, M.D., Williamston, NC
Paul C. Tobin, M.D., Chapel Hill, NC
Patricia F. Triplett, M.D., Greensboro, NC
Gilbert R. Upchurch, Jr., M.D., Ann Arbor, MI
Patrick A. Wilson, M.D., Wilmington, DE

CLASS OF 1992
Number in Class: 152
Percent Donors: 25%

Jorge A. Allende, Jr., M.D., Ukiah, CA
Richard A. Bennett, M.D., Hollidaysburg, PA
Mary M. Bledsoe-Felkner, M.D., Charlotte, NC
J. Wesley Boyd, M.D., Northampton, MA
Lisa A. Brone, M.D., Boulder, CO
Linda H. Butler, M.D., Raleigh, NC
Nancy C. Clayton, M.D., Chapel Hill, NC
Gerald E. Cooley, M.D., Charlotte, NC
Billie F. Cosgrove, M.D., Wilmington, NC
Christopher C. Cosgrove, M.D., Wilmington, NC
Marisa R. D'Silva Whitesell, M.D., Chapel Hill, NC
John F. Ende, M.D., Marion, NC
E. David Evans, M.D., Wilmington, NC
Margaret F. Farmer, M.D., Johnson City, TN
Mary J. Forbes, M.D., Raleigh, NC
Scott K. Garrison, M.D., Raleigh, NC
James G. Hall, M.D., Spartanburg, SC
Mark W. Jenison, M.D., Virginia Beach, VA
Pamela C. Jenkins, M.D., Lyme, NH
Victoria D. Lackey, M.D., Charlotte, NC
Robert E. Larson, M.D., Goldsboro, NC
Nancy Law, M.D., Bloomfield, CT
Thomas C. Logan, M.D., Owensboro, KY
Gordon H. Martin, M.D., League City, TX
Jennifer E. Moore, M.D., Greenbrier, TN
Thomas R. Moore, M.D., Hickory, NC
Walter S. Morris III, M.D., Southern Pines, NC
Martin T. November, M.D., Belmont, MA
Edward J. Primka III, M.D., Knoxville, TN
Lynda R. Primka, M.D., Knoxville, TN
Anand V. Ramanathan, M.D., Darien, IL
J. Cullen Ruff, M.D., Arlington, VA
Scott V. Smith, M.D., Apex, NC
Anjali M. Sues, M.D., Raleigh, NC
Stephen L. Tilley, M.D., Durham, NC
Rita E. Treanor-Plemmons, M.D., Erwin, TN
Karen S. Wood, M.D., Chapel Hill, NC
William V. Yount, M.D., Chicago, IL

CLASS OF 1993
Number in Class: 146
Percent Donors: 36%

Geoffrey A. Allen, M.D., Chapel Hill, NC
Aleta A. Borrud, M.D., Rochester, MN
Catherine B. Bowman, M.D., Atlanta, GA
Rochelle M. Brandon, M.D., Charlotte, NC
Harry L. Broome, Jr., M.D., Phoenix, AZ
John S. Chase, M.D., Iowa City, IA
John D. Corey, M.D., Carrboro, NC
William L. Craig III, M.D., Winston-Salem, NC
Carolyn J. Dalldorf, M.D., Charlottesville, VA
Karla L. DeBeck, M.D., Durham, NC
Cathy A. Donovan, M.D., Onamia, MN
Therese M. Durkin, M.D., Dresser, WI
Laura B. Enyedi, M.D., Chapel Hill, NC
Patrick L. Fry, M.D., Mooresville, NC
S. Lynn Gardner, M.D., Stone Mountain, GA
J. Judd Green, Jr., M.D., Jamestown, NC
Thomas M. Haizlip, Jr., M.D., Banner Elk, NC
W Howard Hall, Morganton, NC
Joseph I. Harwell, M.D., Sharon, MA
Carol L. Hubbard, M.D., Cape Elizabeth, ME
Lauren P. Johnson, M.D., Chapel Hill, NC
C. Anthony Kim, M.D., Puyallup, WA
Leigh A. Lather, M.D., New Bern, NC
Laura S. Lenholt, M.D., Naples, FL
Adam D. Lowenstein, M.D., Denver, CO
David T. May, M.D., Asheville, NC
Lisa L. May, M.D., Asheville, NC
Eugene H. Maynard, Jr., M.D., Smithfield, NC
Richelle L. McDaniel, M.D., Columbus, GA
Susan R. Mims, M.D., M.P.H., Asheville, NC
Carolyn P. Misick, M.D., Springfield, OH
John D. Phipps, M.D., Winston-Salem, NC
John B. Piecyk, M.D., Canton, MA
Eileen M. Raynor, M.D., Jacksonville, FL
Anthony D. Realini, M.D., Little Rock, AR
D. Roderick Rose, Jr., M.D., Winston-Salem, NC
Norman E. Sharpless, M.D., Chapel Hill, NC
Patrick J. Simpson, M.D., Pinehurst, NC
Ellison L. Smith, Jr., M.D., Asheville, NC
Holly A. Stevens, M.D., Charlotte, NC
Charles B. Teague, M.D., Columbus, GA
Theodore T. Thompson, M.D., Abingdon, VA
Rebecca B. Tobin, M.D., Chapel Hill, NC
Paige C. Walend, M.D., Phoenix, AZ
Lisa L. Wang, M.D., Houston, TX
Brian R. Webster, M.D., Wilmington, NC
David A. Wells, M.D., Asheville, NC
William R. Westerkam, M.D., Columbia, SC

Eric A. Whitsel, M.D., Chapel Hill, NC
Alexander M. Wilgus, M.D., Bedford, VA
Kirk L. Woosley, M.D., Charlotte, NC
Melinda T. Wyatt, M.D., Raleigh, NC

CLASS OF 1994
Number in Class: 151
Percent Donors: 23%

*Kurt C. Bachmann, M.D., Birmingham, AL
*Laura H. Bachmann, M.D., Birmingham, AL
William L. Barrett, M.D., Sneads Ferry, NC
David A. Bartholomew, M.D., Chapel Hill, NC
Evan H. Black, M.D., Royal Oak, MI
*Jane H. Brice, M.D., Chapel Hill, NC
Brian E. Brigman, M.D., Durham, NC
Jennifer E. Charlton, M.D., Lynchburg, VA
Peter T. Chu, M.D., Fletcher, NC
*Lisa A. Gillespie, M.D., Lithonia, GA
William H. Goodnight III, M.D., Blacksburg, VA
Natalie G. Gordon, M.D., Denver, CO
Robin P. B. Hicks, M.D., Newton Highlands, MA
Chandra S. Hollier, M.D., Harrisburg, NC
*Roy S. Lewis, M.D., Houston, TX
Melissa M. Lutz, M.D., Chapel Hill, NC
David A. Martin, Jr., M.D., Whiteville, NC
John L. Matthews, M.D., Durham, NC
Margaret M. Matthews, M.D., Ph.D., Columbia, SC
Lucy S. Miller, M.D., Cincinnati, OH
J. Whitman Mims, M.D., Winston-Salem, NC
Jacqueline H. Mims, M.D., Winston-Salem, NC
Daniel H. G. Moore, M.D., Camden, NC
Julia E. Norem, M.D., Fayetteville, NC
Jose L. Plaza, M.D., Charlotte, NC
Claudia C. Prose, M.D., Chapel Hill, NC
John W. Rusher, M.D., Raleigh, NC
Nitin P. Shenoy, M.D., Hickory, NC
*Cathy M. Soldato-Couture, M.D., Kernersville, NC
Robert T. Stone, Jr., M.D., Cary, NC
Hilary H. Timmis, Jr., M.D., Bellevue, OH
Bristol R. Winslow, M.D., Durham, NC
Jill C. Wright, M.D., Graham, NC
Julie L. Wynne, M.D., Millinocket, ME

CLASS OF 1995
Number in Class: 164
Percent Donors: 18%

Helen B. Adams, M.D., North Branford, CT
Marc D. Benevides, M.D., Cary, NC
W. Scott Burgin, M.D., Rochester, NY
Peter A. Caprise, Jr., M.D., FPO, AP
Michele R. Casey, M.D., Raleigh, NC
Andrea B. Dickerson, M.D., Fayetteville, NC
Elisabeth K. Dipietro, M.D., Weston, MA
David B. Dorofi, M.D., Norfolk, VA
*S. Bryan Durham, M.D., Wilmington, NC
Neva T. Edens, M.D., Chapel Hill, NC
*Katherine M. Harper, M.D., Clemmons, NC
*Stephen A. Harper, M.D., Clemmons, NC
Christopher D. Ingram, M.D., Tampa, FL
*Richard H. Jones, M.D., Lexington Park, MD
Jeffrey A. Klein, M.D., Charlotte, NC
Christopher R. Kroll, M.D., Concord, NC
Suzanne Lazorick, M.D., Clayton, NC
Thomas L. O'Connell, Jr., M.D., Greenville, NC
John W. Ogle III, M.D., Longmont, CO
Nicklas B. E. Oldenburg, M.D., Cambridge, MA
Gwenevere C. Parker-Anthony, M.D., Brooklyn, NY
Monica L. Piecyk, M.D., Canton, MA
Laura M. Robert, M.D., Lynchburg, VA
Paul D. Rosen, M.D., New York, NY
Elizabeth F. Rostan, M.D., Charlotte, NC
Carol G. Shores, M.D., Chapel Hill, NC
Christopher J. Summers, M.D., Harrisonburg, VA
John W. Surles, M.D., Macclesfield, NC
H. Clayton Thomason III, M.D., Gastonia, NC
Kelly M. Waicus, M.D., Greenville, NC

CLASS OF 1996
Number in Class: 145
Percent Donors: 23%

Darius K. Amjadi, M.D., Tacoma, WA
Wendy S. Armore-Edds, M.D., Chapel Hill, NC
Clinton K. Atkinson, Jr., M.D., Nashville, TN
Katherine E. Barrett, M.D., Raleigh, NC
David K. Becker, M.D., San Francisco, CA
Gay M. Benevides, M.D., Cary, NC
Cynthia J. Brown, M.D., Waterbury, CT
Michael J. Casey, M.D., Raleigh, NC
Christopher H. Chay, M.D., Asheville, NC
Laura A. Culp, M.D., Winston-Salem, NC
Nicole M. D'Andrea, M.D., Morehead City, NC
Matthew R. Foster, M.D., Lynchville, VA
Douglas K. Graham, M.D., Aurora, CO
Brian E. Grogg, M.D., Rochester, MN
Julie A. Haizlip, M.D., Salt Lake City, UT
Kimberly J. Hamilton, M.D., Dallastown, PA
Shannon G. Hamrick, M.D., San Francisco, CA
David N. Hayes, M.D., Cambridge, MA
Ann E. Hiott, M.D., Winston-Salem, NC
*Doris K. King, M.D., Wilmington, NC
Scott M. Klenzak, M.D., Cumberland Foreside, ME
E. Allen Liles, Jr., M.D., Durham, NC
Michael H. Lowry, M.D., Pine Knoll Shores, NC
Jennifer A. Lutz, M.D., San Francisco, CA
John E. Milko, M.D., Myrtle Beach, SC
Tracey E. O'Connell, M.D., Durham, NC
David N. Quinn, M.D., Columbus, OH
Virgil C. Reid III, M.D., Chicago, IL
Lisa M. Roberts, M.D., Raleigh, NC
Jeffry P. Simko, M.D., Ph.D., San Francisco, CA
William T. Smith IV, M.D., Durham, NC
Alan W. Story, M.D., Newton, NC
Carlos A. Vargas, M.D., Franklin, NC

CLASS OF 1997
Number in Class: 163
Percent Donors: 34%

Henry C. Baggett III, M.D., Anchorage, AK
Michael L. Batten, M.D., New York, NY
Marsha W. Blount, M.D., San Diego, CA
Benjamin C. Brieger, M.D., Austin, TX
Stacy C. Briggs, M.D., West Roxbury, MA
Debbie Ann Brown, M.D., Tacoma, WA
Richard C. Bumgardner, M.D., Wilmington, NC
Grant L. Campbell, M.D., Huntersville, NC
Stephen V. Chiavetta III, M.D., Wilmington, NC
Elizabeth C. Clark, M.D., Portland, OR
Michael T. Cross, M.D., Birmingham, AL
Sarita K. Cross, M.D., Birmingham, AL
*Marta L. Derieg, M.D., Kailua-Kona, HI
Leena S. Dev, M.D., Franklin, MA
Carrie A. Dow-Smith, M.D., Raleigh, NC
Mark T. Dransfield, M.D., Homewood, AL
Charles W. G. Eifrig, M.D., Miami Beach, FL
Janet R. Encarnacion, M.D., Springfield, MO
Eric D. Ervin, M.D., Henderson, KY
Paul M. Flanagan, M.D., Raleigh, NC
Joseph E. Gadzia, M.D., Lawrence, KS
Cathryn A. Geary, M.D., Cincinnati, OH
Bradley C. Gehrs, M.D., Birmingham, AL
*Todd F. Griffith, M.D., Charlotte, NC
Maura L. Hamrick, M.D., Liberty, NC
Jeannie C. Hu, M.D., Charlottesville, VA
Paul H. Kartheiser, M.D., Chapel Hill, NC
Andrew L. Katz, M.D., Raleigh, NC
Dawn E. Kleinman, M.D., Carrboro, NC
Jennifer S. Klenzak, M.D., Cumberland Foreside, ME
Ramesh L. Krishnaraj, M.D., Greensboro, NC
Eric T. Landis, M.D., Charlotte, NC
Kathryn A. Lee, M.D., Denver, CO
Cindi J. Leech, M.D., Salt Lake City, UT
Leah P. McMann, M.D., Dupont, WA
Dawson A. Mims III, M.D., Asheville, NC
Sherene S. Min, M.D., Mebane, NC
Dean S. Morrell, M.D., Chapel Hill, NC
Amy L. Mosher, M.D., Ypsilanti, MI
Jeffrey S. Moyer, M.D., Ann Arbor, MI
*Julia K. Nelson, M.D., Durham, NC
Christopher B. Pugh, M.D., Durham, NC
Jennifer E. Rhodes-Kropf, M.D., New York, NY
T. Christopher Sanchez, M.D., Kapaa, HI
Jeffery D. Smith, M.D., Plymouth, MI
Vincent C. Smith, M.D., Raleigh, NC
Alesia D. Thrift-Cottrell, M.D., Red Springs, NC
Amy M. Ursano, M.D., Chapel Hill, NC
Julie C. Verchick, M.D., Pinehurst, NC
Deepak P. Vivekananthan, M.D., Shaker Heights, OH
Lauren E. Wagner, M.D., Chicago, IL
Melanie P. Walker, M.D., Raleigh, NC
Harry P. Weber, M.D., Mechanicsburg, PA
Christopher R. Williams, M.D., Birmingham, AL
Laura C. Windham, M.D., Durham, NC
Kevin B. Yow, M.D., Apex, NC

CLASS OF 1998
Number in Class: 146
Percent Donors: 34%

E. Denise Absher, M.D., Sparta, NC
John G. Alley, Jr., M.D., Durham, NC
D. Michael Armstrong, M.D., Charleston, SC
Christopher W. Baird, M.D., Pittsburgh, PA
Dalliah M. Black, M.D., Hillsborough, NC
Carol A. Borack, M.D., Verona, WI
Stephen D. Brown, Jr., M.D., Salisbury, NC
Natalie G. Coburn, M.D., Providence, RI
Matthew T. Collins, M.D., Rocky Mount, NC
Alan Cook, M.D., Chapel Hill, NC
Christopher C. Copenhaver, M.D., Verona, WI
Mary S. Crowder, M.D., Wilmington, NC
James M. O. Culver, M.D., Salem, OR
Farr A. Curlin, M.D., Chicago, IL
Joseph G. Degenhard, M.D., Lancaster, PA
Jason E. DeVente, M.D., Apex, NC
Jonathan E. Fischer, M.D., Carrboro, NC
Karolyn B. Forbes, M.D., Carrboro, NC
Cathy C. Goldschmidt, M.D., Rochester, NY
Jerome H. Goldschmidt, M.D., Rochester, NY
Karen L. Grogg, M.D., Rochester, MN
Chad B. Gunnlaugsson, M.D., Ypsilanti, MI
Joshua L. Hardison, M.D., Henderson, NC
Rebeccah A. Hoffman, M.D., Mars, PA
Denise G. Ingram, M.D., Arden, NC

Joseph T. Jenkins, M.D., Chapel Hill, NC
Nancy W. Knight, M.D., Silver Spring, MD
Traci A. Lamothe, M.D., Charlotte, NC
Barbara G. Mattox, M.D., Boston, MA
R. Christopher Miller, M.D., Greensboro, NC
Siobhan M. O'Connor, M.D., Louisville, KY
Robert S. Park, M.D., Durham, NC
William G. Pittman III, M.D., San Francisco, CA
Caroline C. Prochnau, M.D., Asheboro, NC
James M. Schmidt, M.D., Birmingham, AL
Poorvi J. Shah, M.D., Chapel Hill, NC
Brian Shelley, M.D., Albuquerque, NM
Shelia D. Smith, M.D., Richmond, CA
Amy B. Stanfield, M.D., Durham, NC
William J. Steinbach, M.D., Durham, NC
Kathleen F. Stevison, M.D., Hinsdale, IL
William H. Sturgill III, M.D., San Diego, CA
Stephan G. Thiede, M.D., Chapel Hill, NC
Michael M. Walger, M.D., Riverdale, MD
John W. Warner, M.D., Falls Church, VA
Elizabeth S. Weinberg, M.D., Wrightsville Beach, NC
T. Brian Willard, M.D., Columbia, MO
Kristi E. Woods, M.D., Pembroke, NC
Robyn K. Zanard, M.D., Greensboro, NC
Adam J. Zolotor, M.D., Carrboro, NC

CLASS OF 1999

Number in Class: 134
Percent Donors: 33%

James M. Adams, M.D., Los Angeles, CA
Daniel W. Bradford, M.D., Chapel Hill, NC
Craig M. Burnworth, M.D., Fort Walton Beach, FL
Peggy A. Byun, M.D., Yadkinville, NC
H. Scott Cameron II, M.D., Baltimore, MD
Nicole Chaisson, M.D., Saint Paul, MN
John B. Chiavetta, M.D., Rochester, MN
Stanley F. Dover, M.D., Winston-Salem, NC
Carrie L. Dul, M.D., Portland, OR
S. Sheppard Dunlevie, Jr., M.D., Atlanta, GA
Michelle E. Elisburg, M.D., Columbia, SC
Bryon K. Evans, M.D., Malden, MA
William L. Fan, M.D., Durham, NC
Lisa A. Flora, M.D., Bainbridge Island, WA
Robert G. Goodrich, M.D., Chapel Hill, NC
Christina Hardin, M.D., Pembroke, NC
Lisa J. Harrington, M.D., Providence, RI
Angela L. Heider, M.D., Chapel Hill, NC
T. Ryan Heider, M.D., Chapel Hill, NC
Claire E. Holland, M.D., Albuquerque, NM
Yewande J. Johnson, M.D., Birmingham, AL
Thomas F. Laney, Jr., M.D., Taylorsville, NC
Jennifer H. Lee, M.D., Roslindale, MA
Marchi V. Lopez-Linus, M.D., Raleigh, NC
Allison S. McBride, M.D., Nashville, TN
Ben M. Meares, Jr., M.D., Raleigh, NC
Melinda Menezes-Sanchez, M.D., Kapaa, HI
R. Sean Miller, Jr., M.D., Cincinnati, OH
Brian H. Mullis, M.D., Durham, NC
Michael C. Noone, M.D., Mount Pleasant, SC
LeVonne G. Powell-Tillman, M.D., Durham, NC
Elizabeth C. Roede, M.D., New York, NY
Kymberly F. Selden, M.D., Charlotte, NC
Graham E. Snyder, M.D., Raleigh, NC
LaClaire W. Stewart, M.D., Mammoth Lakes, CA
Knox R. Tate, M.D., Atlanta, GA
Kevin L. Thomas, M.D., Durham, NC
C. John Torontow, M.D., Mebane, NC
Julia W. Tsang, M.D., Chapel Hill, NC
A. Elizabeth Underwood, M.D., Salt Lake City, UT
Suzanne S. Vining, M.D., Des Moines, WA
Karen M. Warburton, M.D., Philadelphia, PA
Jonathan M. Williams, M.D., Durham, NC
John J. Young, Jr., M.D., Portland, ME

CLASS OF 2000

Number in Class: 144
Percent Donors: 32%

Frederique C. Bailliard, M.D., Durham, NC
Megan H. Bair-Merritt, M.D., Media, PA
Myriam F. Bauer, M.D., Durham, NC
Troy A. Bunting, M.D., Charleston, SC
Abigail S. Caudle, M.D., Chapel Hill, NC
Romulo E. Colindres, Jr., M.D., Washington, DC
Timothy W. Dancy, M.D., Pittsburgh, PA
Brian W. Downs, M.D., Durham, NC
William T. Durham, M.D., Birmingham, AL
Sandra C. Farkouh, M.D., Boston, MA
*Corey D. Fogleman, M.D., Lancaster, PA
Sonja T. France, M.D., Jacksonville, FL
H. James Hamrick, Jr., M.D., San Francisco, CA
Marie N. Hardy, M.D., Carrboro, NC
Kimberly L. Hartnett, M.D., Portland, ME
Seth C. Hawkins, M.D., Pittsburgh, PA
Carolyn L. Hess, M.D., Charlotte, NC
Shawn B. Hocker, M.D., Chapel Hill, NC
*Caroline M. Hoke, M.D., Durham, NC
Albert H. Holt, Jr., M.D., New York, NY
Jennifer A. Hooker, M.D., Durham, NC
Mark E. Hutchin, M.D., Ann Arbor, MI
Sarah L. Irons, M.D., Rochester, NY
Skyler E. Kalady, M.D., Durham, NC
Deepa Kirk, M.D., Philadelphia, PA
Zane I. Lapinskes, M.D., Henderson, NC
Jennifer E. Larson, M.D., Rochester, NY
Kevin M. Lee, M.D., Hillsborough, NC
Kimberly S. Levin, M.D., San Francisco, CA
Madelena M. Martin, M.D., Highland, CA
Peter H. McHugh, M.D., Memphis, TN
Donald L. McLamb, Jr., M.D., Indianapolis, IN
Mokhtar O. Morgan, M.D., Chesapeake, VA
Michael K. Newman, M.D., Richmond, VA
Stephen W. North, M.D., Rochester, NY
Patrick A. O'Connell, M.D., Glen Burnie, MD
Stephen A. Oljeski, M.D., Norwood, MA
Wendy G. Owen, M.D., Durham, NC
Nerissa M. Price, M.D., Arlington, VA
Lisa Rahangdale, M.D., Chicago, IL
Jonathan R. Saluta, M.D., Richmond, VA
Melanie L. Tew, M.D., Durham, NC
Tanya P. Tiamfook, M.D., Columbia, SC
Neil C. Vining, M.D., Des Moines, WA
Ryan C. Wanamaker, M.D., Durham, NC
John Watts Haresch, M.D., Portsmouth, NH

CLASS OF 2001

Number in Class: 147
Percent Donors: 32%

Jefferson T. Baer, M.D., Philadelphia, PA
Wendy M. Baer, M.D., Philadelphia, PA
Zoe A. Beatty, M.D., Hershey, PA
Adar T. Berghoff, M.D., Jacksonville, NC
Thomas H. Bishop, M.D., Hillsborough, NC
Anne A. Bonpain, M.D., Charlotte, NC
Daniel R. Carrizosa, M.D., Durham, NC
Michael J. Casey, M.D., San Francisco, CA
Donna R. Childress, M.D., Salisbury, NC
Sean V. Costabile, M.D., Antioch, TN
Melanie H. Dixon, M.D., Rochester, MN
*William L. Fangman, M.D., Chapel Hill, NC
Tara A. Forcier, M.D., Maple Grove, MN
Mariam S. George, M.D., Bronx, NY
Debra L. Gibson, M.D., Carrboro, NC
*Cynthia R. Greenlee, M.D., Louisville, KY
Stuart M. Hardy, M.D., Carrboro, NC
Justin B. Hauser, M.D., Chapel Hill, NC
Michael A. Houston, M.D., Durham, NC
Shelley A. Houston, M.D., Durham, NC
D. Shiao-Wen Hsu, M.D., Ph.D., Dallas, TX
Krista M. Johnson, M.D., Chapel Hill, NC
Jonathan J. Juliano, M.D., Minneapolis, MN
Bruce M. Lee, M.D., Rochester, NY
Adair K. Look, M.D., Chelsea, MA
Rodney B. Look, M.D., Chelsea, MA
Beth A. Malizia, M.D., Birmingham, AL
Robert N. Marshall III, M.D. Class of 2001
*Davonia N. W. Michael, M.D., High Point, NC
Alison N. Miller, M.D., Nashville, TN
Pamela A. Oliver, M.D., Winston-Salem, NC
Lori D. Peele, M.D., Chesapeake, VA
Priya V. Rajan, M.D., Long Beach, CA
Aimee L. Schimizzi, M.D., La Jolla, CA
Tamara D. Simon, M.D., Denver, CO
David W. Smith, M.D., Salt Lake City, UT
Elizabeth R. Smith, M.D., Salt Lake City, UT
Stephanie B. Sturgill, M.D., San Diego, CA
Benjamin B. Taylor, M.D., Birmingham, AL
Shelly R. Taylor, M.D., Greendale, WI
Carmen I. Teague, M.D., Charlotte, NC
Tony P. Tsai, M.D., New York, NY
Teresa L. Tullo, M.D., Gibsonville, NC
Ramsey K. Umar, M.D., Ann Arbor, MI
Felicity A. Vanke, M.D., Carrboro, NC
Nam D. Vo, M.D., Durham, NC
Daniel E. Wessell, M.D., Saint Louis, MO

CLASS OF 2002

Number in Class: 146
Percent Donors: 23%

Paul M. Armistead, M.D., Waltham, MA
Eric H. Ball, M.D., Palo Alto, CA
Marina Benaur, M.D., Princeton, NJ
Ouida L. Brown, M.D., Portland, OR
Kevin J. Bruen, M.D., Salt Lake City, UT
Jason T. Bundy, M.D., Hummelstown, PA
Brian L. Cohen, M.D., Miami, FL
Charles S. Ebert, Jr., M.D., Durham, NC
Leesha M. Ellis, M.D., Chamblee, GA
George K. Escaravage, Jr., M.D., Durham, NC
Vaishali Escaravage, M.D., Durham, NC
Matthew C. Foster, M.D., Chapel Hill, NC
Kimberly A. Gush, M.D., Chapel Hill, NC
Craig F. Hart, M.D., Durham, NC
Michelle L. Hernandez, M.D., Durham, NC
Duncan L. Hill, M.D., Charlottesville, VA
Robert B. Hollander III, M.D., Healdsburg, CA
*Brian E. Kouri, M.D., Winston-Salem, NC
*Vanessa K. Kouri, M.D., Winston-Salem, NC
Joshua P. Landau, M.D., Daly City, CA
Luke B. McDaniel, M.D., York, PA
David R. Mendelsohn, M.D., Charlotte, NC
Manoj P. Menon, M.D., Seattle, WA
Arshad Rahim, M.D., Atlanta, GA
Noelle C. Robertson, M.D., Graham, NC
Jonathan C. Routh, M.D., Rochester, MN
Stephanie A. Santos, M.D., New York, NY
Alan E. Schulman, M.D., Charlottesville, VA
Samir V. Sejpal, M.D., Bear, DE
Amen Sergew, M.D., Minneapolis, MN
Miriam C. Tepper, M.D., Boston, MA
Jill K. Wilson, M.D., Durham, NC
Jennifer E. Yates, M.D., Greensboro, NC

CLASS OF 2003

Number in Class: 132
Percent Donors: 12%

Shannon C. Baker, M.D., Oak Ridge, NC
*Jonathan S. Berg, M.D., Houston, TX
Amarinthia E. Curtis, M.D., Chapel Hill, NC
Molly R. Fortner, M.D., Nashville, TN
Chetan V. Gondha, M.D., Indian Trail, NC

Jeffrey B. Hodgin, M.D., Ph.D., Chapel Hill, NC
Neville Irani, M.D., Chapel Hill, NC
Geoffrey Kaung, M.D., Durham, NC
Joshua W. Knowles, M.D., Ph.D., Palo Alto, CA
Kathleen Leonard, M.D., Palo Alto, CA
Leilani S. Mullis, M.D., Durham, NC
Brian Poligone, M.D., Palo Alto, CA
Elaine G. Poligone, M.D., Ph.D., Palo Alto, CA
Todd M. Poret, M.D., White River Junction, UT
Alison C. Roxby, M.D., Carrboro, NC
Amanda S. Young, M.D., Chapel Hill, NC

ALLIED HEALTH SCIENCES

Alison J. Alaimo, M.S., Midland, MI
Karen F. Anderson, Lawrenceville, GA
Sally C. Atwell, M.S., Atlanta, GA
Julia L. Baldree-Rathke, Mandeville, LA
Nancy N. Belding, M.S., Hillsborough, NC
W. Joseph Belding, Hillsborough, NC
Pamela M. Bimbo, Asheboro, NC
Maureen S. Brennan, Natick, MA
Elizabeth A. Bridges, Atlanta, GA
Stephanie B. Brooks, Wilmington, NC
Kristine G. Buddendorff, Mobile, AL
Suzanne C. Bullock, M.S., Blowing Rock, NC
Cynthia M. Burt, M.S., Santa Monica, CA
Margot G. Butchart, Ormond Beach, FL
Mary C. Caldwell, Charlotte, NC
Sylvia L. Campbell, Alexandria, VA
Amy J. Carr-Demurjian, Cherry Hill, NJ
Jean M. Carroll, Lyons, NY
Jeffrey C. Celeste, Wilmington, NC
Kathryn K. Cheek, M.D., Columbus, GA
Kyle A. Clontz, Granite Falls, NC
Amanda J. Core, Cary, NC
Debra K. Cowan, Chapel Hill, NC
Victoria Z. Coward, Jacksonville, FL
Joyce B. Crawford, Columbia, IL
Merle M. Crawford, Hummelstown, PA
Gina B. Cupstid, Charlotte, NC
Dorothy L. Daley, Wilmington, DE
Sharyn H. Davies, Little Rock, AR
J. Marcus Davis, Chapel Hill, NC
Anne L. Dixon, New York, NY
Barbara H. Doster, Hendersonville, NC
Helen M. Dyer, Oxford, MS
Katherine F. Fischer, Winter Haven, FL
Anthony L. Fore, Thomasville, NC
Elizabeth W. Francisco, Athens, GA
William D. Fyfe, Durham, NC
Teresa B. Gagliardi, Glen Allen, VA
Dawn G. Geer, Jacksonville, FL
Jean M. Genova, Chapel Hill, NC
Jo Ellen F. Gilbert, M.S., Jacksonville, FL
Diane P. Greene, M.S., Raleigh, NC
Heidi A. Grieb-Ginn, M.S., Landenberg, PA
Lorene P. Gruzdis, Santa Rosa Beach, FL
Harriett L. Hargis, Durham, NC
Janet L. Harrill, M.S., Forest City, NC
William S. Harrill, Hillsborough, NC
Kelly C. Hart, Greenville, NC
Michele J. Hartle, Davidson, NC
Barbara M. Hellinger, Penhook, VA
Michael D. Hobbs, Plano, TX
Catherine C. Hodgins, Loveland, OH
Charlotte R. Holmes, M.S., Raleigh, NC
Sharon R. Hughes, Denton, NC
Roxanna L. Humphries, Shelby, NC
Gail R. Hunter, Jonesboro, GA
Carrol G. Johnson, Knightdale, NC
Abbey C. Jones, M.P.T., Kalamazoo, MI
Linda V. Jones, M.S., Savay, IL
Patricia N. Jones, Hillsborough, NC
Jane E. Jordan, The Woodlands, TX
Janet K. Kerr, Charlotte, NC
Deborah W. King, Bremerton, WA
Tracey M. Kirby, Holly Springs, NC
Kimberly B. Klug, Menomonee Falls, WI
Kelly W. Knox, Williamston, NC
Jeffrey L. Krafft, Waxhaw, NC
Lauree M. Kruyer, Southern Pines, NC
Margaret W. LaManna, Shaker Heights, OH
Akella C. Lane, Charlotte, NC
Tamara T. Lapsley, Cary, NC
Esther G. Lawley, Fayette, AL
Catharine K. Lees, Charlotte, NC
Annie B. Levan, Mooresville, NC
Frank Lewek, Wake Forest, NC
Nance E. Longworth, M.S., Cornelius, NC
Holly L. Loosen, Baltimore, MD
Frankie W. Lyons, Salisbury, NC
Thomas V. Mack, Avon, CT
Ann W. Marston, Richmond, VA
Natalie E. Mason-Fry, Chapel Hill, NC
Angela R. McAfee, Pleasant Prarie, WI
Kathy O. McBride, Lumberton, NC
Christina S. McGinnis, Mooresville, NC
Amy G. McLamb, M.S., Indianapolis, IN
Sheila R. McMahon, Raleigh, NC
Mary-Frances Merwin, M.S., Knoxville, TN
Mark Miele, M.D., Gastonia, NC
Marguerite B. Moltz, Blowing Rock, NC
Clayton D. Morgan, Raleigh, NC
Mary C. Myers, Marietta, GA
Virginia M. Nieland, Charleston, SC
Mary K. O'Neill, Mauldin, SC
Kathleen A. Ong, Colorado Springs, CO
Jennifer P. Pate, Wilmington, NC
Joyce R. Phelps, Carrollton, VA
Dacia N. Pitzer, Cleveland, OH
Elizabeth B. Piver, Emerald Isle, NC
Susan M. Porr, M.S., Sanford, NC
Joyce J. Prillaman, Mocksville, NC
Katherine R. Reilly, Poughquag, NY
Elizabeth Riggs, Greensboro, NC
Julie G. Rose, M.S., Winston-Salem, NC
Jennifer C. Ruble, Virginia Beach, VA
Diosdado G. Salaveria, Sarasota, FL
Janice S. Sanders, Norwood, NC
Rachel J. Sanders, M.S., Juneau, AK
Debra E. Shanker, M.S., West Bloomfield, MI
Carol Ann Siebert, Chapel Hill, NC
Sondra D. Sigmon, Davidson, NC
Katharine C. Simmons, M.S., Acton, MA
Sherri C. Sindel, Mobile, AL
Susan S. Skeen, Elon, NC
Susan J. Smith, Newton, NC
Melinda A. Snider, Wooster, OH
Tracy J. Stilwell, Rutherford College, NC
Wanda Storch, Stella, NC
Pamela P. Stubbs, Fallbrook, CA
John T. Swinson, M.S., Alexandria, VA
Catherine M. Tarone, Bethesda, MD
Jill W. Tino, Sumter, SC
Laura H. Trogdon, Asheboro, NC
Anna H. Troutman, M.S., Raleigh, NC
Elizabeth E. Via, Winston-Salem, NC
Elizabeth T. Vipperman, Mechanicsburg, PA
Ko-Han Wang, Chapel Hill, NC
Laura J. Ward, Asheville, NC
Sheree B. Watson, Hickory, NC
Shelby T. Weisberg, Setauket, NY
Cheryl H. Whelan, Louisville, KY
Randah R. Whitley, Chapel Hill, NC
Elizabeth C. Wilkinson, Youngsville, NC
Jo C. Willson, Raleigh, NC
Mary M. Winslow, Morrisville, NC
Windy H. Wise, Newton, NC
Margaret H. Wojtkiewicz, Redondo Beach, CA
Dianne H. Wright, Roswell, GA

BASIC SCIENCES

Michael J. Ackerman, Ph.D., Bethesda, MD
Mary A. Agna, M.D., Yellow Springs, OH
Julia T. Arnold, Ph.D., Bethesda, MD
Eric T. Baldwin, Ph.D., Kalamazoo, MI
Vytautas A. Bankaitis, Ph.D., Chapel Hill, NC
Linda M. Boland, Ph.D., Woodbury, MN
Timothy J. Bolling, M.S., Wilmington, DE
Joan P. Boone, Efland, NC
Carl D. Bortner, Ph.D., Durham, NC
James S. Bostick, M.S., Richmond, VA
Aziz A. Boxwala, Ph.D., Boston, MA
Jayne C. Boyer, Ph.D., Durham, NC
Ronald K. Charlton, Ph.D., Jacksonville, FL
Marie L. Chiu, Ph.D., Chapel Hill, NC
Nancy W. Clark, Reston, VA
David N. Collier, Ph.D., Greenville, NC
Douglas A. Cotanche, Ph.D., Southborough, MA
James J. Crawford, Ph.D., Chapel Hill, NC
Bobbi P. Crummett, Chapel Hill, NC
Kimberly A. Daeke, Cary, NC
Anne B. Deutsch, Greensboro, NC
Norman A. Doggett, Ph.D., Santa Cruz, NM
Lori Ann Dostal, Ph.D., Brighton, MI
Martha W. Easley, Amelia Island, FL
David J. Edwards, Ph.D., Pittsburgh, PA
Jeffrey T. Erickson, Ph.D., Shaker Heights, OH
James C. W. Finley, M.D., Ph.D., Cleveland, OH
Leah S. Fletcher, Ph.D., Geneseo, NY
E. Elizabeth Floyd, Ph.D., Columbia, MD
Paul Forscher, Ph.D., Guilford, CT
Katherine L. Fries, Ph.D., North Branford, CT
Mary Jo B. Fyfe, Ph.D., Durham, NC
Virginia L. Godfrey, Ph.D., Hillsborough, NC
Delores J. Grant, Ph.D., Durham, NC
Robert P. Gruninger, M.D., Chapel Hill, NC
Xiaohong Gu, Ph.D., Chapel Hill, NC
Albert G. Haddad, Sr., Ph.D., Alachua, FL
Deana M. Hapke, Ph.D., Cary, NC
Marcia W. Herbert, Virginia Beach, VA
Carol B. Hill, Ph.D., Hillsborough, NC
David J. Holbrook, Jr., Ph.D., Chapel Hill, NC
Yung T. Huang, Ph.D., Richmond Heights, OH
Marthalou Hunter, Brevard, NC
Joan C. Huntley, Ph.D., Chapel Hill, NC
Alfredo J. Julian, M.S., Decatur, GA
Scott E. Justus, Chapel Hill, NC
Durema H. Kestner, High Rolls Mountain Park, NM
Steven W. King, Ph.D., Florence, SC
Susan A. Klemm, Charlotte, NC
Elizabeth H. Kopiwoda, Murfreesboro, TN
Robert G. Lamb, Ph.D., Midlothian, VA
James V. Lange, Ph.D., Stone Mountain, GA
Tyra M. Leazer, Ph.D., Shawnee, KS
Constance F. Lefler, Ph.D., Fort Worth, TX
Robert A. Lerch, Ph.D., Spring Valley, NY
David P. Lewis, Ph.D., Englewood, NJ
Beth C. Lubahn, Ph.D., Columbia, MO

Michael C. Madden, Ph.D., Chapel Hill, NC
Mary L. Marazita, Ph.D., Wexford, PA
Lorraine H. Mamell, Ph.D., Tucson, AZ
Arthur Maslow, M.S., Tacoma, WA
Sheryl V. Massey, Anderson, SC
Stanley K. Mauldin, Ph.D., King of Prussia, PA
William C. McGimsey, Ph.D., Pasadena, TX
Bonita F. McNeil, Fayetteville, NC
Rita J. Menzies, Pinehurst, NC
Mary E. Meyerand, Ph.D., Cross Plains, WI
Beth E. Mileson, Ph.D., Falls Church, VA
Daniel H. Mooney, M.S., Freehold, NJ
Jack T. Mosher, Ph.D., Ypsilanti, MI
David M. Mottola, Ph.D., Cary, NC
Barbara J. Muller-Borer, M.D., Elon, NC
Michelle M. Nicolle, Ph.D., Jacksonville, FL
Jennifer A. Obernier, Ph.D., Fairfax, VA
Paula M. Oliver, Denver, CO
Mary Ella M. Pierpont, Ph.D., Saint Paul, MN
Nell N. Pressley, Lilburn, GA
Derek T. Puff, Ph.D., Long Beach, CA
Ranjani Ramakrishnan, Beaverton, OR
Emily A. Rantzos, Asheville, NC
Marjorie S. Read, Ph.D., Durham, NC
Andrea M. Resetar, Ph.D., Bayonne, NJ
Cynthia E. Rewerts, M.S., Efland, NC
Kent L. Rossman, Ph.D., Durham, NC
Constance D. Rothermel, Ph.D., Essex Fells, NJ
James P. Ryan, Ph.D., Memphis, TN
Richard W. Scearce, Jr., Ph.D., Hillsborough, NC
Dana L. Shuey, Ph.D., Landenberg, PA
Jennifer L. Sloan, Ph.D., Chicago, IL
Phillip G. Smith, Durham, NC
Mark J. Snider, Ph.D., Wooster, OH
Sarah A. Sporn, Ph.D., Wilmington, DE
Sanford L. Steelman, Ph.D., Hickory, NC
Daniel M. Stoughton, Ph.D., Gaithersburg, MD
Monroe J. Stutts III, Ph.D., Chapel Hill, NC
Rebekah J. Surles, Lillington, NC
Laura I. Tanner, Ph.D., San Francisco, CA
Louisa B. Thompson, Roswell, GA
Kenneth B. Touw, Ph.D., Chapel Hill, NC
Ellen B. Troutman, Salisbury, NC
Irene M. Vandiviere, Lancaster, KY
Lu Wang, Ph.D., New York, NY
Diane M. Wierzbicki, Ph.D., Point Roberts, WA
Camille B. Williams, Milford, MA
Paula K. Williams, Chicago, IL
Barnaby E. Wray, M.S., Knoxville, TN
Yuxin Yin, Ph.D., Tenafly, NJ
Huabing Yuan, Ph.D., Chesterfield, MO

FACULTY

John J. Aluise, M.D., Chapel Hill, NC
Stephen R. Aylward, Ph.D., Chapel Hill, NC
Thomas J. Bacon, Dr.P.H., Durham, NC
Alan R. Beeber, M.D., Chapel Hill, NC
Walter R. Benson, M.D., Chapel Hill, NC
Ewa Blass, M.D., Pittsboro, NC
Stuart O. Bondurant, Jr., M.D., Chapel Hill, NC
Gary D. Bos, M.D., Columbus, OH
Carl L. Bose, M.D., Pittsboro, NC
Watson A. Bowes, Jr., M.D., Chapel Hill, NC
H. Robert Brashear, Jr., M.D., Chapel Hill, NC
R. Alan Briggaman, M.D., Chapel Hill, NC
James A. Bryan II, M.D., Chapel Hill, NC
Charles T. Burke, M.D., Chapel Hill, NC
Donald K. Bynum, M.D., Durham, NC
Culley C. Carson III, M.D., Durham, NC
Mauricio Castillo, M.D., Chapel Hill, NC
Robert C. Cefalo, M.D., Chapel Hill, NC
John A. Cidlowski, Ph.D., Chapel Hill, NC
William L. Coleman, M.D., Chapel Hill, NC
Anna Marie Connolly, M.D., Chapel Hill, NC
Ernest Craige, M.D., Chapel Hill, NC
George W. Crane, M.D., Durham, NC
William J. Cromartie, M.D., Chapel Hill, NC
Robert E. Cross, Ph.D., Durham, NC
Laurence E. Dahners, M.D., Chapel Hill, NC
Frederic G. Dalldorf, M.D., Chapel Hill, NC
Joanna S. Dalldorf, M.D., Chapel Hill, NC
Georgette A. Dent, M.D., Chapel Hill, NC
Joanne DeVeaugh-Geiss, M.A., Chapel Hill, NC
Luis A. Diaz, M.D., Chapel Hill, NC
William Droegemueller, M.D., Chapel Hill, NC
Thomas M. Egan, M.D., Chapel Hill, NC
James E. Faber, M.D., Chapel Hill, NC
Jeffrey H. Fair, M.D., Chapel Hill, NC
Janet J. Fischer, M.D., Chapel Hill, NC
Newton D. Fischer, M.D., Chapel Hill, NC
Elman G. Frantz, M.D., Chapel Hill, NC
Joseph M. Garfunkel, M.D., Chapel Hill, NC
William E. Garrett, M.D., Ph.D., Bahama, NC
Karen A. Graham, M.D., Chapel Hill, NC
Joe W. Grisham, M.D., Chapel Hill, NC
John J. Haggerty, Jr., M.D., Chapel Hill, NC
Robert A. Harrell, M.D., Chapel Hill, NC
William D. Heizer, M.D., Chapel Hill, NC
Daniel R. Hilliker, Ph.D., Chapel Hill, NC
Jeffrey L. Houpt, M.D., Chapel Hill, NC
Jaroslav F. Hulka, M.D., Chapel Hill, NC
David L. Ingram, M.D., Chapel Hill, NC
Lars F. Jarskog, M.D., Chapel Hill, NC
David G. Kaufman, M.D., Ph.D., Chapel Hill, NC
William K. Kaufmann, Ph.D., Durham, NC
Ernest N. Kraybill, M.D., Chapel Hill, NC
Jan A. Kylstra, M.D., Chapel Hill, NC
Joseph K. T. Lee, M.D., Chapel Hill, NC
Michael Y. Lee, M.D., Chapel Hill, NC
Gayle E. Lester, Ph.D., North Bethesda, MD
Jeffrey A. Lieberman, M.D., Chapel Hill, NC
Gloria G. Liu, M.D., Chapel Hill, NC
Carol N. Lucas, Ph.D., Chapel Hill, NC
Richard B. Mailman, Ph.D., Chapel Hill, NC
Allan A. Maltbie, M.D., Durham, NC
G. Philip Manire, Ph.D., Chapel Hill, NC
Elizabeth S. Mann, M.D., Chapel Hill, NC
Stanley J. Martinkosky, Ph.D., Chapel Hill, NC
Michael J. McMahon, M.D., Chapel Hill, NC
Campbell W. McMillan, M.D., Chapel Hill, NC
Samantha E. Meltzer-Brody, M.D., Chapel Hill, NC
Gary B. Mesibov, Ph.D., Chapel Hill, NC
Anthony A. Meyer, M.D., Chapel Hill, NC
Terry L. Noah, M.D., Carrboro, NC
Margaret R. Nusbaum, D.O., M.P.H., Chapel Hill, NC
John N. Oh, M.D., Cary, NC
Valerie M. Parisi, M.D., M.P.H., Chapel Hill, NC
Edward R. Perl, M.D., Chapel Hill, NC
Thomas D. Petes, Ph.D., Chapel Hill, NC
Arthur J. Prange, Jr., M.D., Hillsborough, NC
Wayne A. Price, M.D., Chapel Hill, NC
J. Marc Rhoads, M.D., Chapel Hill, NC
Julian G. Rosenman, M.D., Chapel Hill, NC
David S. Rubenstein, M.D., Ph.D., Chapel Hill, NC
Desmond K. Runyan, M.D., Chapel Hill, NC
Robert S. Sandler, M.D., Chapel Hill, NC
James H. Scatliff, M.D., Chapel Hill, NC
John T. Sessions, Jr., M.D., Chapel Hill, NC
Julie L. Sharpless, M.D., Chapel Hill, NC
George F. Sheldon, M.D., Chapel Hill, NC
William W. Shockley, M.D., Chapel Hill, NC
Sidney C. Smith, Jr., M.D., Chapel Hill, NC
Brian C. Stabler, Ph.D., Chapel Hill, NC
Kenneth Sugioka, M.D., Chapel Hill, NC
Kathleen K. Sulik, Ph.D., Chapel Hill, NC
Timothy Taft, M.D., Chapel Hill, NC
Catherine A. Taylor, M.D., Chapel Hill, NC
Joel E. Tepper, M.D., Chapel Hill, NC
Colin G. Thomas, Jr., M.D., Chapel Hill, NC
James D. Thullen, M.D., Morehead City, NC
Judith E. Tintinalli, M.D., Chapel Hill, NC
Robert D. Valley, M.D., Chapel Hill, NC
Charles M. Van Der Horst, M.D., Chapel Hill, NC
Judson J. Van Wyk, M.D., Chapel Hill, NC
Mahesh A. Varia, M.D., Chapel Hill, NC
Kathleen A. Veness-Meehan, M.D., Chapel Hill, NC
Simon J. P. Warren, M.D., Chapel Hill, NC
Paul S. Weinhold, Ph.D., Durham, NC
LeRoy D. Werley, Jr., Chapel Hill, NC
Clayton E. Wheeler, Jr., M.D., Chapel Hill, NC
J. Kenneth Whitt, Ph.D., Chapel Hill, NC
Frank C. Wilson, M.D., Chapel Hill, NC
Richard V. Wolfenden, Ph.D., Chapel Hill, NC
Bonnie C. Yankaskas, Ph.D., MPH, Chapel Hill, NC
James R. Yankaskas, M.D., Chapel Hill, NC

HOUSE STAFF

Jerome H. Abramson, M.D., Chattanooga, TN
Henry Akinbi, M.D., Cincinnati, OH
John T. Alexander II, M.D., San Diego, CA
Nadia M. Anderson, M.D., Durham, NC
Elizabeth M. Andrew, M.D., Memphis, TN

Cecilia S. Anspach, M.D., Stuart, FL
William E. Anspach III, M.D., Stuart, FL
James W. Asaph, M.D., Portland, OR
David E. Ballard, M.D., Albuquerque, NM
Thomas M. Bashore, M.D., Durham, NC
Paul W. Biddinger, M.D., Cincinnati, OH
Pauline M. Blair, M.D., New Bern, NC
Robert S. Boger, M.D., Brookfield, CT
Leroy W. Bowersox, M.D., Whittier, CA
Thomas A. Brackbill, M.D., Greensboro, NC
Lois L. Bready, M.D., San Antonio, TX
Marianne S. Breslin, M.D., Chapel Hill, NC
John J. Britton, M.D., Charleston, SC
Bruce R. Brodie, M.D., Greensboro, NC
Michael Brody, M.D., Cary, NC
Robert A. Brown, M.D., Fort Myers, FL
Wallace D. Brown, M.D., Raleigh, NC
George F. Brumback, M.D., Greensboro, NC
Edwin L. Bryan, M.D., Greensboro, NC
Robert V. Buccini, M.D., Greensboro, NC
Kenneth A. Buddendorff III, M.D., Mobile, AL
William R. Bullock, M.D., Charlotte, NC
Holly J. Burge, M.D., Raleigh, NC
W. Woodrow Burns III, M.D., Chapel Hill, NC
William T. Callahan, M.D., Gainesville, GA
Edmund R. Campion, M.D., Chapel Hill, NC
Wayne Cascio, M.D., Chapel Hill, NC
Verne E. Chaney, Jr., M.D., New York, NY
G. Rayburn Cheely, M.D., Raleigh, NC
Jack C. Childers, Jr., M.D., Lutherville, MD
Charles E. Clark IV, M.D., Roanoke, VA
M. David Cogburn, M.D., Asheville, NC
Thomas P. Cornwall, M.D., Chapel Hill, NC
Joseph D. Corpening, M.D., Salisbury, NC
Stanley C. Cox III, M.D., Southern Pines, NC
David H. Cresson, Jr., M.D., Lynchburg, VA
Alan W. Cross, M.D., Chapel Hill, NC
Earl H. Crumpler, Jr., M.D., Raleigh, NC
John T. Curnes, M.D., Greensboro, NC
Charles H. Dart, Jr., M.D., Oxnard, CA
Catherine A. Daum, M.D., Wilmington, NC
Scott M. Desman, M.D., Stuart, FL
Thomas E. Digby, M.D., Newton, NJ
Douglas R. Dirschl, M.D., Chapel Hill, NC
Franklin M. Draper, Jr., M.D., Seattle, WA
Douglas A. Drossman, M.D., Chapel Hill, NC
Diane M. Duffy, M.D., Graham, NC
Michael F. Durfee, M.D., Raleigh, NC
James E. Eadens, M.D., Sarasota, FL
Chris Elder, M.D., Fairview, NC
Eydie M. Ellis, M.D., Philadelphia, PA
David M. Fajgenbaum, M.D., Raleigh, NC
Samir M. Fakhry, M.D., Great Falls, VA
Michael Faurest, M.D., Louisville, KY
Thomas W. Fell, Jr., M.D., Glendale, CA
Paul S. Fellenbaum, M.D., Albany, NY
John Filley, M.D., Lady Lake, FL
Stephen B. Fleishman, M.D., Fayetteville, NC
Catherine A. Forneris, M.D., Chapel Hill, NC
Charles E. Frederick, M.D., Greensboro, NC
Marcia Freed, M.D., Portland, OR
Giuliana G. Gage, M.D., Raleigh, NC
James C. Garbutt, M.D., Pittsboro, NC
Gaia Georgopoulos, M.D., Denver, CO
James S. Gibbs, M.D., Winston-Salem, NC
Brian M. Go, M.D., Raleigh, NC
Robert N. Golden, M.D., Chapel Hill, NC
Linda S. Goodwin, M.D., Hendersonville, NC
Thomas C. Goodwin, M.D., Hendersonville, NC
Marcus C. Grimes, M.D., Kingsport, TN
Larry D. Grubb, M.D., Florence, SC
Jagmohan D. Gupta, M.D., Goldsboro, NC
Todd H. Hansen, M.D., Asheville, NC
Steven D. Harlan, M.D., Hickory, NC
Carl R. Hartrampf, Jr., M.D., Atlanta, GA
Margaret R. Helton, M.D., Carrboro, NC
Xaver F. Hertle, M.D., Greensboro, NC
Karl B. Hiatt, M.D., Mesa, AZ
Michael A. Hill, M.D., Durham, NC
Charles J. Hodulik, M.D., Madison, WI
Donna S. Holland, M.D., Boca Raton, FL
Peter J. Holland, M.D., Boca Raton, FL
Stanley G. Hopp, M.D., Nashville, TN
James R. Hubbard, M.D., Dubuque, IA
Katherine Huffman-Falk, M.D., Chapel Hill, NC
Burton R. Hutto, M.D., Chapel Hill, NC
Peter C. Jacobson, M.D., Virginia Beach, VA
Peter L. Jacobson, M.D., Pinehurst, NC
Ali Jarrahi, M.D., Winston-Salem, NC
Patrick L. Jasper, M.D., Somerset, KY
Lida Morawetz Jeck, M.D., Durham, NC
Robert B. Johnson, M.D., Cary, NC
Thomas L. Johnson, M.D., Inglewood, CA
F. Douglas Jones, M.D., Greenville, NC
Janine C. Jones, M.D., Nicholasville, KY
Raleigh O. Jones, Jr., M.D., Nicholasville, KY
Lee Kasik, M.D., Greensboro, NC
Jeffrey D. Katz, M.D., Greensboro, NC
Paul T. Kayye, M.D., Angier, NC
John E. Keith, Jr., M.D., Spartanburg, SC
Shannon C. Kenney, M.D., Chapel Hill, NC
William D. Kerr, Jr., M.D., Winnetka, IL
Moyra E. Kileff, M.D., Chapel Hill, NC
Jonathan S. Krauss, M.D., Augusta, GA
Ramesh Krishnan, M.D., Houston, TX
Walter L. Lamar, M.D., Tulsa, OK
Randolph L. Lee, M.D., Apex, NC
Margaret W. Leigh, M.D., Chapel Hill, NC
Steven Lipper, M.D., Chapel Hill, NC
Thomas B. Logan, M.D., Henderson, KY
Gerald J. Longa, M.D., Terre Haute, IN
Jane L. Madison, M.D., Chapel Hill, NC
Martin L. Madorsky, M.D., Miami Beach, FL
H. Raymond Madry, Jr., M.D., Raleigh, NC
Bruce T. Malenbaum, M.D., Chapel Hill, NC
Peter J. Massicoff, M.D., Boston, MA
Charles R. McAdams, Jr., M.D., Charlotte, NC
Robert K. McClure, M.D., Chapel Hill, NC
R. Layton McCurdy, M.D., Charleston, SC
W. Benson McCutcheon, Jr., M.D., Durham, NC
Steven L. Mendelsohn, M.D., Asheville, NC
Frederick P. Meyerhoefer, M.D., Canton, OH
Theodore Miclau III, M.D., San Francisco, CA
Donald B. Middleton, M.D., Pittsburgh, PA
Attef A. Mikhail, M.D., Park Hills, KY
Mark D. Miller, M.D., Chesterfield, MO
Preston R. Miller, M.D., Atlanta, GA
David K. Millward, M.D., Raleigh, NC
Thomas A. Montgomery, M.D., Athens, GA
James J. Murphy, M.D., Arden, NC
Keith A. Nance, M.D., Raleigh, NC
J. Wills Oglesby, M.D., Nashville, TN
Jeffrey A. Okamoto, M.D., Lebanon, PA
Donald A. O'Neill, M.D., Virginia Beach, VA
Frederick H. Opper, M.D., Wilmington, NC
Louis V. Pacilio, M.D., Leeds, MA
C. Leon Partain, M.D., Ph.D., Franklin, TN
Edward N. Pattishall, M.D., Chapel Hill, NC
Daniel L. Phillips, M.D., Eugene, OR
Franco M. Piazza, M.D., Rockville, MD
George H. Pierson, Jr., M.D., Greensboro, NC
Cedric W. Porter, Jr., M.D., Asheville, NC
N. Regina Rabinovich, M.D., Rockville, MD
Deborah L. Radisch, M.D., Apex, NC
Bradley B. Randall, M.D., Sioux Falls, SD
Rupa C. Redding-Lallinger, M.D., Chapel Hill, NC
Hal J. Rollins, Jr., M.D., Greensboro, NC
William G. Ryan, M.D., Birmingham, AL
John F. Sandbach, M.D., Austin, TX
Nat H. Sandler, M.D., Lexington, KY
Roland E. Schmidt, M.D., Chapel Hill, NC
Stephen B. Schuster, M.D., Greensboro, NC
Martin L. Schwartz, M.D., Portland, OR
Ronald P. Schwarz, M.D., Raleigh, NC
Nicole P. Shepard, M.D., North Charleston, SC
Brian C. Shiro, M.D., Wilmington, NC
Bryan W. Smith, M.D., Chapel Hill, NC
David A. Smith, M.D., Chapel Hill, NC
Henry L. Smith II, M.D., Charlotte, NC
Dixie L. Soo, M.D., Chapel Hill, NC
Liang Y. Soo, M.D., Chapel Hill, NC
Ernest B. Spangler, Jr., M.D., Greensboro, NC
Stanley M. Spinola, M.D., Indianapolis, IN
Steven J. Stafford, M.D., Raleigh, NC
George A. Stouffer, M.D., Chapel Hill, NC
Thomas M. Swantkowski, M.D., Southern Pines, NC
Paul Tawney, M.D., Chapel Hill, NC
Eugene E. Taylor, M.D., Milwaukie, OR
Bryce Templeton, M.D., Villanova, PA
John M. Thorp, Jr., M.D., Chapel Hill, NC
Brian A. Torre, M.D., Roanoke, VA
Steven L. Tracy, M.D., Gastonia, NC
Landrum S. Tucker, Jr., M.D., Chapel Hill, NC
Henry A. Unger, M.D., Cary, NC
William B. Veazey, M.D., Greensboro, NC
Cheryl A. Viglione, M.D., Greensboro, NC
Peter A. Wallenborn III, M.D., Asheville, NC
Steven R. Wells, M.D., Cary, NC
Robert W. Whitener, M.D., Greensboro, NC
Frances K. Widmann, M.D., Chapel Hill, NC
Charles F. Willson, M.D., Greenville, NC
Robert K. Wilson, Jr., M.D., Pensacola, FL
George T. Wolff, M.D., Greensboro, NC
Halbert O. Woodward, M.D., Brownwood, TX
H. Linton Wray, M.D., Chevy Chase, MD
Virgil H. Wynia, M.D., Raleigh, NC
Peter R. Young, Sr., M.D., Greensboro, NC
Robin A. Yurk, M.D., Vandalia, IL
Nakhleh P. Zarzar, M.D., Raleigh, NC
Thomas A. Zirker, M.D., Greensboro, NC
**** Denotes Loyalty Fund Junior Associates***

from the president

Dear Alumni:

I am fond of referring to medicine as the greatest profession on earth, one that is much more than a trade. On occasion I have been asked to explain the difference between the two. There are a number of definitions, but the one I like best consists of four points.

First and foremost, a profession requires its members to put the welfare of those they serve above their own interests. Next, its members are expected to continue to learn about their field and develop their skills throughout their careers. Third, its members believe in and practice self-discipline when they err. Lastly, members of a profession strongly believe in helping to educate and prepare the next generation to succeed. When we do not live up to these criteria, we lose the right to call what we do a profession.

I'm sure that there are a few of you considering the last point and saying, "How can I make an impact on the next generation of physicians if I am not a professor?" A valid question, but one with several answers. One is to live and practice as professionals and in turn, teach by the example that portrays. Another is to follow the lead of our alumni association's former president, Mary Susan Fulghum, MD.

Dr. Fulghum found a way to benefit her field when she initiated a mentoring program between practicing physicians and medical students. She recognized that with certain lines of work, it is the responsibility of those with experience to convey to those who are still learning, that more is expected of them if they expect to be members of a profession.

Another way to ensure the education and development of future physicians is by giving of ourselves financially. Last year, more than 50 percent of our alumni did just this by contributing to the School of Medicine, the Loyalty Fund, the Medical Alumni Endowment Fund and funds for endowed professorships and scholarships. The impact of this level of giving cannot truly be appreciated until you look back at how far we have come.

Twelve years ago we gave 10 merit scholarships of $200 each. Today we are able to provide 51 full-tuition scholarships. We also have established two four-year alumni teaching professorships currently held by Drs. Nancy Chesheir and Harvey Hamrick. Significant funds have also been given to the Health Sciences Library and Medical Alumni Endowment Fund.

Over time I have been asked, "Why should I give money to a state school when I pay taxes?" In 1989, the state was providing one-third of the funds needed to educate each medical student. The remainder came from tuition, the lowest of any medical school in the country, private practice of the faculty and research funds. Today, state support has dropped to only 12 percent and continues to fall each year with the state's budget crisis. Our faculty has felt the same economic crunch from managed care and governmental controls as do those of us in private practice.

Despite the hard economic times that have befallen us all, we have met — sometimes just barely — our financial goal each year for the Loyalty Fund. The success of these fund-raising efforts is thanks to the hard work of hundreds of alumni asking other alumni to give through class reunions and county campaigns.

This year we have set a goal of $760,000 with gifts from at least 41 percent of our 5,300 living alumni. I am confident we will again succeed because of the hard work of both our alumni volunteers and the staff of The Medical Foundation of North Carolina, Inc., and the generosity of each of our alumni as we prepare the next generation of professionals.

Sincerely,

John W. Foust, MD '55

CME/Alumni Calendar

Oct. 11-12 – Chapel Hill
Breast Imaging and Digital Mammography Conference

Oct. 17-18 – Chapel Hill
Fall Alumni Weekend

Nov. 21 – Chapel Hill
Psychiatry Across the Ages

Nov. 22-23 – Chapel Hill
Ham Symposium

Feb. 13-14 – Chapel Hill
Multidisciplinary Advances in the Treatment of Prostate Cancer

March 31-April 2 – Chapel Hill
28th Annual Internal Medicine Conference

April 16-18 – Chapel Hill
Spring Alumni Weekend

May 5 – Chapel Hill
HIV Care 2004

July 16-18 – Amelia Island, Fla.
Heart Failure Management

For more information, go to www.med.unc.edu/alumni and www.med.unc.edu/cme.

Estate Planning Notice

Many individuals would like to make a major gift to the UNC medical center, but cannot commit current assets for such a purpose. Through a will, however, anyone can make a more significant gift than they might ever have thought possible by designating a specific sum, a percentage, or the residue of their estate for the benefit of the medical center.

To provide a bequest, simply include a paragraph in your will naming The Medical Foundation of North Carolina, Inc. as a beneficiary. For example:

"I give, devise and bequeath (the sum of $_____) or (_____ % of my estate) or (the residue of my estate) to The Medical Foundation of North Carolina, Inc., a 501(C)(3) created to maintain funds for the UNC medical center with principal offices located at 880 Airport Road, Chapel Hill, North Carolina."

This language creates an unrestricted bequest for use by the medical center when and where the need is greatest, or you may specify that your gift be used for a particular purpose.

For further information on bequests, contact Jane McNeer at (919) 966-1201, (800) 962-2543, or jmcneer@email.unc.edu.

Nonprofit Organization
U.S. Postage
PAID
Chapel Hill, NC
Permit No. 24

PERIODICALS
HEALTH SCIENCES LIBRARY
CB 7585
CAROLINA CAMPUS